

SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP
220 KV TRANSMISSION LINE PROJECT
CPUC A.08-05-039
SCH #: 2008081090

Draft Environmental Impact Report

Prepared for:
California Public Utilities Commission

June 2009



SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP
220 KV TRANSMISSION LINE PROJECT
CPUC A.08-05-039
SCH #: 2008081090

Draft Environmental Impact Report

Prepared for:
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

June 2009

225 Bush Street
Suite 1700
San Francisco, CA 94104
415.896.0000
www.esassoc.com

Los Angeles

Oakland

Olympia

Petaluma

Portland

Sacramento

San Diego

Seattle

Tampa

Woodland Hills

207584.01



**PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298**



**To: State Clearinghouse, Responsible and Trustee Agencies, Property Owners
& Interested Parties**

From: Jensen Uchida, Environmental Project Manager

**Subject: NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT
(DRAFT EIR) AND PUBLIC MEETING:
San Joaquin Cross Valley Loop Transmission Project (A.08-05-039)
SCH No. 2008081090**

Date: June 16, 2009

The California Public Utilities Commission (CPUC) has prepared a Draft Environmental Impact Report (Draft EIR) under the California Environmental Quality Act (CEQA) for consideration of Southern California Edison's (SCE) application to construct, operate and maintain the San Joaquin Cross Valley Loop Transmission Project (A.08-05-039). The Draft EIR details the Proposed Project, evaluates and describes the potential environmental impacts associated with the construction, operation and maintenance of the Proposed Project, identifies those impacts that could be significant, and presents mitigation measures which, if adopted by the CPUC or other responsible agencies, could avoid or minimize these impacts. The Draft EIR also evaluates alternatives to the Proposed Project, including the No Project Alternative, as required by CEQA.

Description of the Proposed Project.

The Proposed Project is located in Tulare County including portions of the cities of Visalia and Farmersville, the community of Lemon Cove, and unincorporated areas of Tulare County. SCE requests authorization to:

- Replace approximately 1.1 miles of two sets of single circuit 220 kV transmission line with a single double circuit transmission line to be constructed on the western side of SCE's existing right of way (ROW) immediately north of the Rector substation;
- Construct an approximately 18.5 mile-long, double circuit transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation. The first 1.1 miles of the new transmission line would be constructed on the eastern side of SCE's existing ROW adjacent to the new 1.1 miles of double circuit line described above;
- Install electrical equipment and substation supporting structures for the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at the Rector Substation to accommodate the transmission lines; and
- Remove wave traps and line tuners and installation of additional protective relays at Rector Substation, Springville Substation, Vestal Substation, and Big Creek 3 Substation.

The objective of the Proposed Project is to build electrical facilities necessary to maintain safe and reliable electric service to customers, and serve the forecasted electrical demand in the southeastern portion of the San Joaquin Valley.

Public Comment on the Draft EIR.

The Draft EIR is available for a 45-day public comment period June 16, 2009 through July 31, 2009. The public may present comments and concerns regarding the Proposed Project and the adequacy of the Draft EIR. Written comments on the Draft EIR must be postmarked or received by fax or e-mail no later than **July 31, 2009**. Please be sure to include your name, address, and telephone number in your correspondence.

Written comments on the Draft EIR should be sent to:

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
Fax: (415) 896-0332
E-mail: sjxvl@esassoc.com

The CPUC will also hold a public comment meeting to receive oral and written comments from interested parties. Following the end of the public comment period, responses to all comments received on the Draft EIR and submitted within the specified 45-day review period will be prepared by the CPUC and included in a response to comments document, which together with the Draft EIR, will constitute the Final EIR for the Proposed Project. The public meeting will be held:

Thursday July 23, 2009
6:30 pm – 9:00 pm
Visalia Convention Center
303 E. Acequia Avenue
Visalia, CA

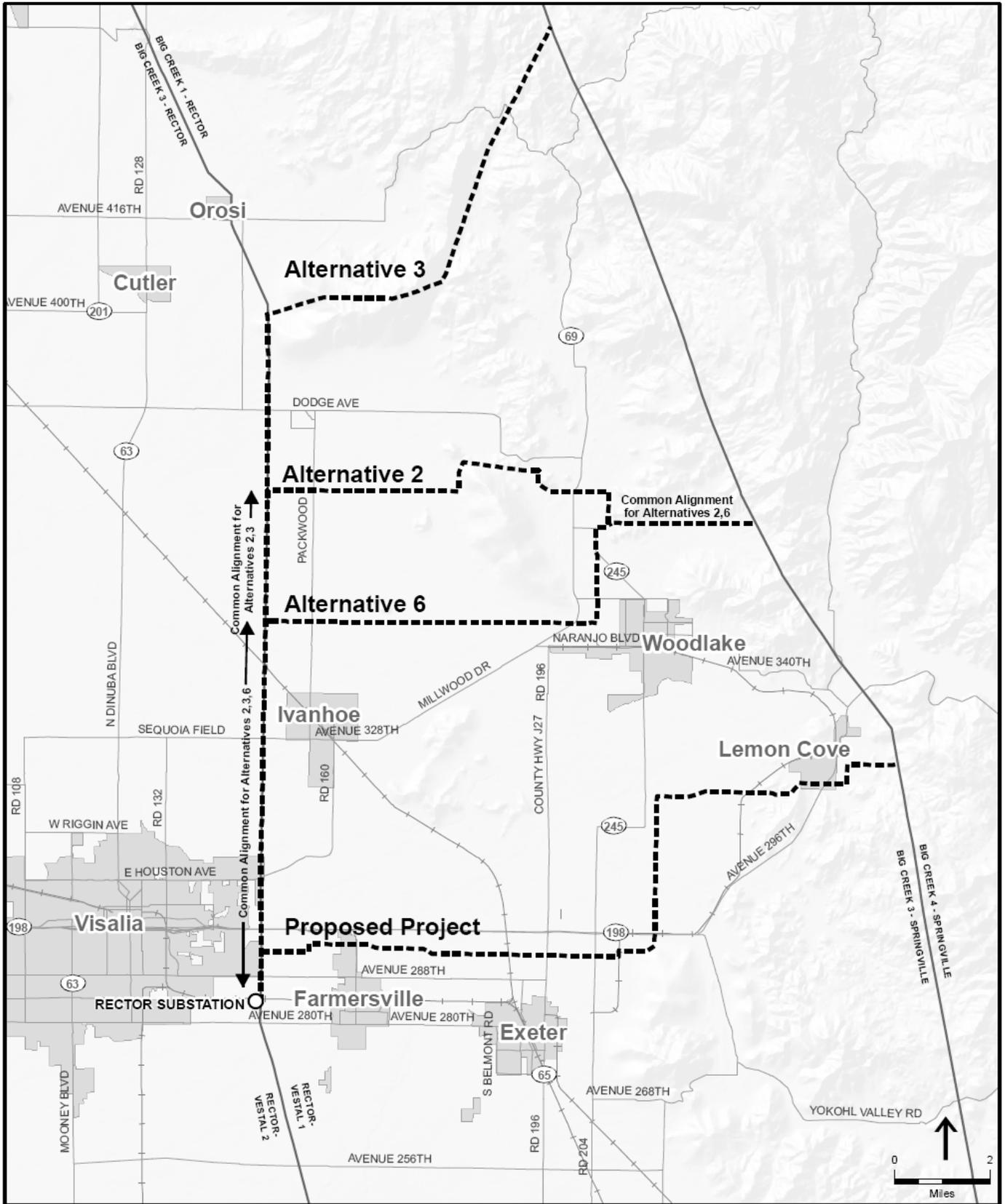
Availability of Draft EIR.

Copies of the Draft EIR will be available for public review at the Visalia and Woodlake Branches of the Tulare County Library, and on the project website: <http://www.cpuc.ca.gov/Environment/info/esa/sjxvl/index.html>. This website will be used to post all public documents during the environmental review process and to announce any upcoming public meetings. Hard copies or CD copies of the Draft EIR may be requested by telephone at (415) 962-8409 or by e-mail at sjxvl@esassoc.com.

Project information repositories include the following branches of the Tulare County Library:

<p>Visalia Branch 200 West Oak Avenue Visalia, CA 93291-4993 Phone : (559) 713-2700</p>	<p>Woodlake Branch 400 West Whitney Woodlake, CA 93286-1298 Phone : (559) 564-8424</p>
---	--

REMINDER: Draft EIR comments will be accepted by fax, e-mail, or postmark through July 31, 2009. Please be sure to include your name, address, and telephone number.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Proposed Project Overview

TABLE OF CONTENTS

SCE's San Joaquin Cross Valley Loop Transmission Project, (A.08-05-039) Draft Environmental Impact Report

	<u>Page</u>
Executive Summary	ES-1
ES.1 Introduction/Background	ES-1
ES.2 Alternatives	ES-7
ES.3 Environmental Impacts and Mitigation Measures	ES-11
ES.4 Summary Comparison of the Proposed Project and Alternatives	ES-13
ES.5 Impact Summary Tables	ES-15
1. Introduction	1-1
1.1 Overview of Proposed Project	1-1
1.2 Project Objectives, Purpose and Need	1-1
1.3 Agency Use of This Document	1-2
1.4 Public Review and Comment.....	1-3
1.5 Reader's Guide to This EIR	1-6
2. Project Description	2-1
2.1 Introduction	2-1
2.2 Project Location	2-1
2.3 Existing System	2-1
2.4 SCE's Proposed Project	2-3
2.5 Project Components	2-6
2.6 Right-of-Way Requirements	2-22
2.7 Construction	2-23
2.8 Operation and Maintenance	2-40
2.9 Electric and Magnetic Fields Summary.....	2-41
2.10 Requirement Permits and Approvals	2-44
3. Alternatives and Cumulative Projects	3-1
3.1 Alternatives Development and Screening Process	3-1
3.2 Alternatives Screening Methodology	3-2
3.3 Summary of Screening Results	3-5
3.4 Alternatives Evaluated in this EIR.....	3-10
3.5 Alternatives Eliminated from Full EIR Evaluation.....	3-20
3.6 Cumulative Projects.....	3-27

	<u>Page</u>
4. Environmental Analysis	4-1
Introduction to Environmental Analysis	4-1
4.1 Aesthetics	4.1-1
4.2 Agriculture Resources	4.2-1
4.3 Air Quality	4.3-1
4.4 Biological Resources	4.4-1
4.5 Cultural Resources	4.5-1
4.6 Geology, Soils, Seismicity, and Mineral Resources	4.6-1
4.7 Hazards and Hazardous Materials	4.7-1
4.8 Hydrology and Water Quality	4.8-1
4.9 Land Use, Planning, and Policies	4.9-1
4.10 Noise	4.10-1
4.11 Population and Housing	4.11-1
4.12 Public Services	4.12-1
4.13 Recreation	4.13-1
4.14 Transportation and Traffic	4.14-1
4.15 Utilities and Services Systems	4.15-1
5. Comparison of Alternatives	5-1
5.1 Comparison Methodology	5-1
5.2 Evaluation of Project Alternatives	5-2
5.3 Environmentally Superior Alternative	5-7
5.4 No Project Alternative vs. the Environmentally Superior Alternative	5-8
6. CEQA Statutory Sections	6-1
6.1 Growth-Inducing Effects	6-1
6.2 Significant Environmental Effects that Cannot be Avoided	6-2
6.3 Significant Irreversible Changes	6-3
6.4 Cumulative Impacts	6-3
7. Report Preparers	7-1
8. Mitigation Monitoring, Reporting, and Compliance Program	8-1

Appendices

- A. Scoping Report
- B. Electric and Magnetic Fields (EMF)
- C. Project Alternative Road Stories
- D. System Engineering Reports
- E. Air Quality
- F. Certificate of Service and Mailing List

Page**List of Figures**

ES-1	Project Location.....	ES-2
ES-2	Proposed Project Overview	ES-9
2-1	Project Location	2-2
2-2	Existing and Proposed Transmission System.....	2-4
2-3	Proposed Project Overview	2-5
2-3a	Proposed Project	2-7
2-3b	Proposed Project	2-8
2-3c	Proposed Project	2-9
2-3d	Proposed Project	2-10
2-3e	Proposed Project	2-11
2-3f	Proposed Project	2-12
2-3g	Proposed Project	2-13
2-3h	Proposed Project	2-14
2-3i	Proposed Project	2-15
2-3j	Proposed Project	2-16
2-4	Replacement of Single Circuit 220kV Structures with Double Circuit 220kV Structures.....	2-18
2-5	Transmission Structures to be Located 1.1 Miles North of Rector Substation....	2-19
2-6	Structures for Proposed Project.....	2-21
2-7	Typical Construction Sequence	2-28
2-8	Typical Construction Stringing Activity.....	2-30
2-9	EMF Levels.....	2-43
3-1	Alternatives Overview	3-9
3-2	Cumulative Projects.....	3-34
4.1-1	Viewpoint Map	4.1-4
4.1-2a	Existing Setting	4.1-5
4.1-2b	Existing Setting	4.1-6
4.1-2c	Existing Setting	4.1-7
4.1-2d	Existing Setting	4.1-8
4.1-2e	Existing Setting	4.1-9
4.1-3	Visual Simulation of Project Site	4.1-27
4.1-4	Visual Simulation of Project Site	4.1-28
4.1-5	Visual Simulation of Project Site	4.1-29
4.1-6	Visual Simulation of Project Site	4.1-30
4.1-7	Visual Simulation of Project Site	4.1-31
4.1-8	Visual Simulation of Project Site	4.1-32
4.1-9	Visual Simulation of Project Site	4.1-33
4.1-10	Visual Simulation of Project Site	4.1-34
4.1-11	Visual Simulation of Project Site	4.1-35
4.1-12	Visual Simulation of Project Site	4.1-36
4.1-13	Visual Simulation of Project Site	4.1-37
4.2-1	Important Farmlands.....	4.2-4
4.2-2	Williamson Act Contracted Land.....	4.2-6
4.4-1	Distribution of Habitats within the Study Area	4.4-3
4.4-2	Special Status Plant Species and Sensitive Communities within the Study Area	4.4-9
4.4-3	Special Status Terrestrial Species within the Stud Area	4.4-10
4.4-4	Designated Critical Habitat	4.4-14
4.8-1	Local Hydrology	4.8-2
4.9-1	Existing Land Use.....	4.9-2

List of Figures (continued)

4.9-2	General Plan Land Uses.....	4.9-5
4.9-3	City of Visalia General Plan Land Uses	4.9-9
4.9-4	City of Farmersville General Plan Land Uses	4.9-11
4.10-1	Noise Monitoring Locations.....	4.10-5

List of Tables

ES-1	Summary of Project Components	ES-4
ES-2	Summary of Significant Unmitigable (Class I) Environmental Impacts of the Proposed Project and Alternatives	ES-14
ES-3	Proposed Project vs. Alternatives Summary of Environmental Impact Conclusions.....	ES-16
ES-4	Summary of Impacts and Mitigation for the Proposed Project	ES-17
ES-5	Summary of Impacts and Mitigation for the Alternatives	ES-24
1-1	Summary of Potential Permit Requirements	1-4
2-1	Summary of Project Components	2-6
2-2	Summary of Pole Information	2-20
2-3	Summary of Access Road Requirements	2-24
2-4	Pole and Tower Installation Metrics	2-26
2-5	Land Disturbance Estimates	2-32
2-6	Construction Equipment Requirements	2-35
2-7	Estimated Construction Workforce	2-39
2-8	Proposed Construction Timetable.....	2-39
2-9	Comparison of Calculated Magnetic Fields at Edges of Right of Way	2-42
2-10	Summary of Permits Requirements	2-44
3-1	Summary of Preliminary Significant Environmental Impacts of the Proposed Project.....	3-6
3-2	Summary of Alternatives Screening Analysis, SCE's San Joaquin Cross Valley Loop Transmission Project	3-7
3-3	Summary of Typical Pole Installation Metrics for Alternative 2	3-11
3-4	Summary of Access Road Requirements for Alternative 2	3-11
3-5	Construction Timetable for Alternative 2	3-12
3-6	Summary of Typical Pole Installation Metrics for Alternative 3	3-14
3-7	Summary of Access Road Requirements for Alternative 3	3-14
3-8	Construction Timetable for Alternative 3.....	3-15
3-9	Summary of Construction Assumptions for Alternative 6.....	3-17
3-10	Summary of Typical Pole Installation Metrics for Alternative 6	3-17
3-11	Construction Timetable for Alternative 6.....	3-18
3-12	Cumulative Scenario for the San Joaquin Cross Valley Loop Transmission Project.....	3-28
4.1-1	Major Roads in Project Area	4.1-17
4.1-2	Summary of Visual Sensitivity Findings, Viewer Types, Visual Exposures, and Visual Quality	4.1-20
4.1-3	Guidelines for Determining Adverse Visual Impact Significance.....	4.1-25
4.2-1	Crops Grown in ROW of Proposed Project and Alternatives	4.2-2
4.2-2	Farmland Conversion from 2004–2006 in Tulare County	4.2-3
4.2-3	Agricultural Land Contained in the Right-of-Way of the Proposed Project and Alternatives	4.2-5

Page**List of Tables (continued)**

4.2-4	Temporary and Permanent Construction Impacts to Agricultural Lands from the Proposed Project.....	4.2-11
4.2-5	Designated Farmland Crops Permanently Disturbed by the Proposed Project.....	4.2-13
4.2-6	Temporary and Permanent Construction Impacts to Agricultural Lands from Alternative 2.....	4.2-18
4.2-7	Crops that would be Permanently Disturbed by Alternative 2.....	4.2-18
4.2-8	Temporary and Permanent Construction Impacts to Agricultural Lands from Alternative 3.....	4.2-20
4.2-9	Crops that would be Permanently Disturbed by Alternative 3.....	4.2-21
4.2-10	Temporary and Permanent Construction Impacts to Agricultural Lands from Alternative 6.....	4.2-23
4.2-11	Crops that would be Permanently Disturbed by Alternative 6.....	4.2-24
4.3-1	Air Quality Data Summary (2003–2007) for the Study Area.....	4.3-3
4.3-2	State and Federal Criteria Air Pollutant Standards, Effects, and Sources.....	4.3-5
4.3-3	Recommended Actions of Climate Change Proposed Scoping Plan.....	4.3-10
4.3-4	Estimated Proposed Project Construction Emissions.....	4.3-15
4.4-1	Special-status Species Reported in or Considered for the Proposed Project and Alternatives.....	4.4-11
4.6-1	Principal Active Faults/Significant Seismic Sources.....	4.6-2
4.6-2	Historical Earthquakes that Affected the Study Area.....	4.6-3
4.7-1	Regulatory Agency Databases Accessed.....	4.7-2
4.7-2	Hazardous Materials Sites in the Vicinity of the Proposed Project.....	4.7-3
4.7-3	Federal and State Laws and Regulations Regarding Hazardous Materials....	4.7-6
4.8-1	Beneficial Uses of Waters Within the Study Area.....	4.8-7
4.8-2	Definitions of Beneficial Uses of Surface Waters.....	4.8-7
4.8-3	Proposed 2006 CWA Section 303(d) List of Water Quality Limited Segments in the Study Area.....	4.8-8
4.10-1	Ambient Noise Levels – 24-Hour Measurement.....	4.10-6
4.10-2	10-Minute Average Ambient Noise Levels in the Study Area.....	4.10-7
4.10-3	City of Visalia Exterior Noise Limits.....	4.10-9
4.10-4	Typical Maximum Noise Levels from Construction Equipment.....	4.10-16
4.11-1	Year 2000 Populations and Demographics.....	4.11-1
4.11-2	Historic and Estimated Future Population Growth, 1980–2025.....	4.11-2
4.11-3	Year 2000 Housing Data.....	4.11-2
4.11-4	Household Estimates: 2000 to 2008.....	4.11-2
4.12-1	Study Area School Districts.....	4.12-4
5-1	Summary of Significant Unmitigable (Class I) Environmental Impacts of the Proposed Project and Alternatives.....	5-3
5-2	Proposed Project vs. Alternatives, Summary of Environmental Impact Conclusions.....	5-4
8-1	Mitigation Monitoring, Reporting and Compliance Program for the San Joaquin Cross Valley Loop Transmission Project.....	8-9

EXECUTIVE SUMMARY

ES.1 Introduction / Background

Southern California Edison (SCE), in its California Public Utilities Commission (CPUC) application for the San Joaquin Cross Valley Loop Transmission Project (A.08-05-039), filed on May 30, 2008, seeks a Certificate of Public Convenience and Necessity (CPCN) to construct electrical facilities pursuant to CPUC General Order (GO) 131-D. The application includes the Proponent's Environmental Assessment (PEA) (SCE, 2008) prepared pursuant to Rule 2.4 of CPUC's Rules of Practice and Procedure.

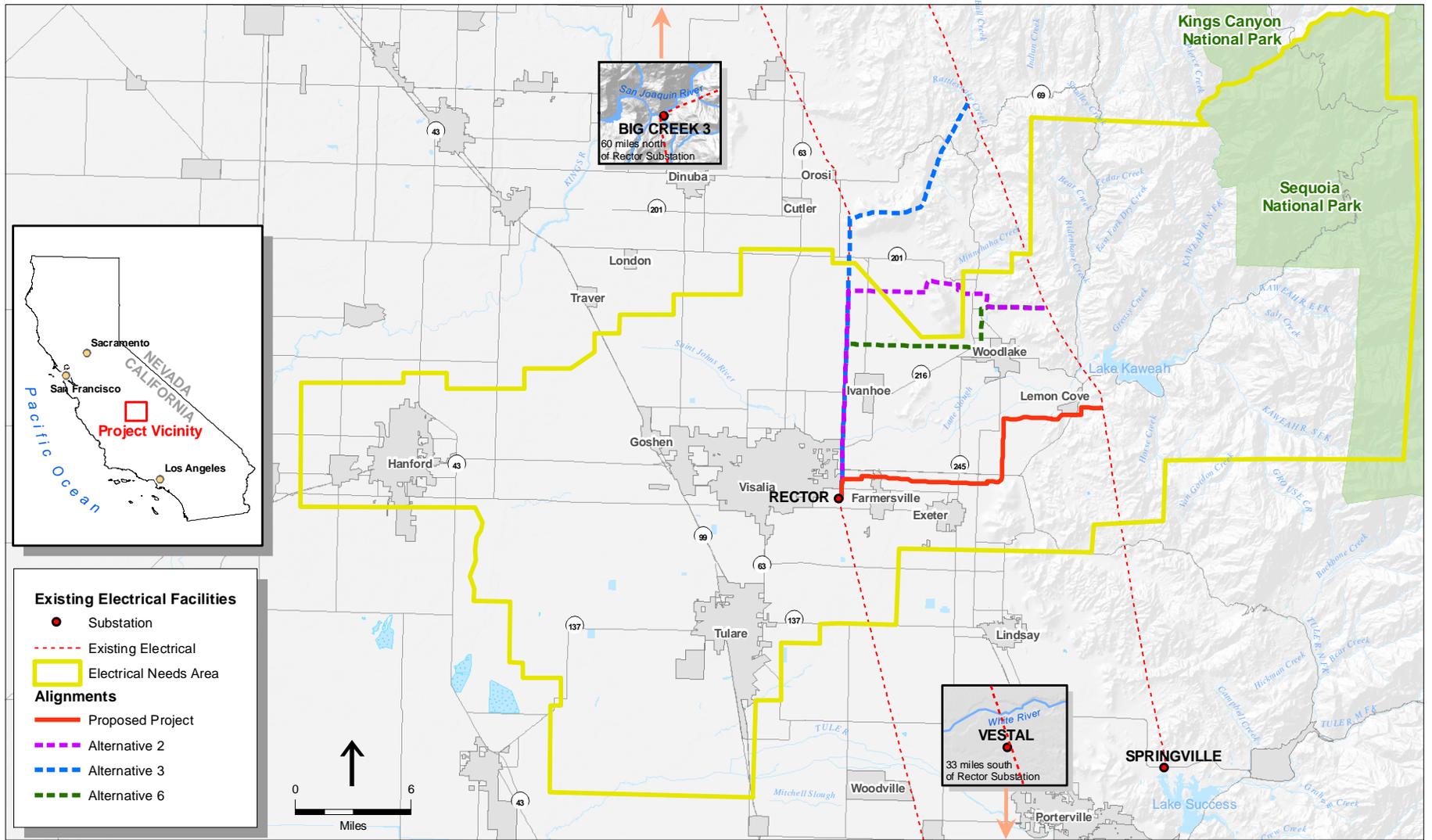
Currently four SCE owned and operated 220 kV transmission lines, commonly referred to as the Big Creek Corridor, move electricity from the Big Creek Hydroelectric Project (Big Creek) to the Electrical Needs Area which encompasses the cities of Tulare, Visalia, Hanford, Farmersville, Exeter and Woodlake, as well as the surrounding areas of Tulare and Kings Counties (Figure ES-1). Two of the lines begin at Big Creek and terminate at the Rector Substation (Big Creek 1-Rector 220 kV transmission line and Big Creek 3-Rector 220 kV transmission line) while the other two lines begin at Big Creek and terminate at the Springville 220/66 kV Substation (Big Creek 3-Springville 220 kV transmission line and Big Creek 4-220 kV transmission line). In its application, SCE requested authorization to loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation by constructing 18.5 miles of new transmission line and replacing 1.1 miles of existing transmission line. SCE also requested permission to modify Rector Substation and to remove wave traps and line tuners and install protective relays at the Rector, Springville, Vestal, and Big Creek 3 Substations.

This Draft EIR has been prepared to consider the potential environmental impacts from the Proposed Project, and to identify and evaluate a range of alternatives. Based on this evaluation and the documentation which follows, this Draft EIR identifies Alternative 2 as the Environmentally Superior Alternative.

ES.1.1 Proposed Project

The Proposed Project consists of the following activities:

- Replacement of approximately 1.1 miles of two parallel sets of existing single circuit 220 kV transmission line segments with 1.1 miles of double circuit transmission line constructed on the western side of SCE's existing right-of-way (ROW), immediately north of Rector Substation. This would clear the eastern side of the existing SCE ROW in order to provide a location for the construction of the first 1.1 miles of the new transmission line described immediately below.



San Joaquin Cross Valley Loop Transmission Project . 207584.01
Figure ES-1
Project Location

- Construction of a new, approximately 18.5-mile long, double circuit 220 kV transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the 220 kV Rector Substation, creating the new Big Creek 3-Rector No. 2 220 kV transmission line circuit and the new Rector-Springville 220 kV transmission line circuit. The first 1.1 miles of the new double circuit transmission line would be on the eastern side of SCE's existing ROW adjacent to the new double circuit 1.1 mile line segment described above.
- Installation of electrical equipment and substation supporting structures for the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at Rector Substation to accommodate the transmission lines.
- Removal of wave traps and line tuners and installation of additional protective relays at Rector Substation, Springville Substation, Vestal Substation, and Big Creek 3 Substation.

On the 1.1 mile section of the existing transmission line, the Proposed Project would replace 26 existing lattice single circuit towers with approximately six double circuit tubular steel poles and one steel lattice structure, leaving the eastern side of the ROW clear for the new double circuit transmission line. Replacement structures would be taller than existing structures. The approximately 18.5 miles of new transmission line would require installation of 96 double circuit tubular poles and 12 double circuit lattice towers. Towers would be used in areas where additional structuring strength would be required such as areas requiring longer conductor spans or turning points. A summary of the major components of the Proposed Project is provided in Table ES-1.

The Proposed Project is located in northwestern Tulare County, California, near the cities of Visalia, Farmersville, and Exeter. The Proposed Project transmission line would traverse east from the City of Visalia and north of the cities of Farmersville and Exeter (Figure ES-1). The Proposed Project would generally cross agricultural lands and scattered rural residences between the Rector substation located southeast of the City of Visalia and the Big Creek 4-Springville existing transmission line located at the western foothills of the Sierra Nevada. Agriculture in the area consists of orchards (i.e., citrus, walnut, plum, fig), row crops (such as hay and alfalfa) and grazing. A portion of the Proposed Project alignment (approximately 1.1 miles) would be located within an existing SCE transmission line ROW, while approximately 17.4 miles of the Proposed Project alignment would require acquisition of new ROW.

SCE identified the objectives for the San Joaquin Cross Valley Loop Transmission Project in its PEA as follows:

- Provide safe and reliable electric service consistent with NERC/WECC and CAISO reliability criteria.
- Provide safe and reliable electric service consistent with SCE's electrical system planning guidelines.
- Increase transmission capacity between the Big Creek Hydroelectric Project and Rector Substation to mitigate overload conditions.

**TABLE ES-1
SUMMARY OF PROJECT COMPONENTS**

Replace two sets of single circuit 220 kV transmission towers with new 220 kV double circuit structures

- From the Rector Substation to 1.1 miles north within the existing SCE ROW
- Remove approximately 26 single circuit lattice towers, conductor, and assemblies
- Install approximately six double circuit tubular poles, one double circuit lattice tower, and replace or modify two single circuit lattice towers
- Install two circuits of 1033.5 thousand circular mils (kcmil) non-specular aluminum conductor steel reinforced (ACSR), with one conductor per phase and three phases per circuit
- Install one optical ground wire for communication and shielding
- Insulator type: Polymer
- Structure heights: Approximately 120 to 160 feet above ground
- Span lengths: Between approximately 850 feet and 1,050 feet

New double circuit 220 kV transmission line from Rector Substation to Big Creek 3-Springville 220 kV transmission line

- From the Rector Substation to a connection point on the Big Creek 3-Springville 220 kV transmission line
- Line length: 18.5 miles long (1.1 miles of existing ROW, 17.4 miles of new ROW to be acquired)
- Install approximately 96 double circuit tubular poles, six single-phase tubular poles at the connection point, and 11 double lattice steel towers (six tubular poles and one lattice tower within existing SCE ROW, and 90 tubular poles and 10 lattice towers within the new ROW to be acquired)
- Install two circuits of 1033.5 kcmil non-specular ACSR conductor, one conductor per phase and three phases per circuit
- Install one optical ground wire for communication and shielding
- Insulator type: Polymer
- Structure height: Approximately 120 to 160 feet above ground
- Span lengths: Between approximately 400 feet and 1,200 feet
- New access: Approximately eight miles of new access roads and spur roads

Rector Substation Modifications

- Relocate the terminations of two existing transmission lines to adjacent dead-end bays to accommodate connection of the new transmission lines to the existing 220 kV switchrack
- Equip two 220 kV line positions with circuit breakers, disconnects, and switchracks to accommodate connection of the two new transmission lines to the existing 220 kV switchrack
- Replace the two existing circuit breakers
- Construct a Mechanical and Electrical Equipment Room (MEER) to house protective relay equipment

Rector Substation, Big Creek 3 Substation, Vestal Substation, and Springville Substation Modifications

- Install upgraded protective relays and remove existing wave trap and line tuner
-
- Reduce the need to interrupt customer electrical service under transmission line outage conditions.
 - Minimize the need to reduce Big Creek Hydroelectric Project generation under transmission line outage conditions.
 - Minimize electrical service interruption to customers by scheduling the construction of new facilities in an orderly and rational matter.

- Meet project need while minimizing environmental impact.
- Meet project need and construction schedule in a cost effective manner.

The EIR team requested additional technical data from SCE and conducted an independent assessment of that information to better define the most important basic objectives of the Proposed Project for use in the alternatives screening process. Based on two technical papers prepared by SCE and additional analysis by the EIR team, it was determined that “safe and reliable electric service” in the Electrical Needs Area is currently limited by two critical system constraints: power flow capacity and system strength. Accordingly, the EIR team determined that the basic project objectives for the Proposed Project are to:

- Substantially improve power flow capabilities; and
- Substantially improve system strength.

ES.1.2 Summary of Public Involvement Activities

In response to letters of concern and comments from the public regarding the Proposed Project, the CPUC held two educational workshops in Tulare County. The first workshop was held on Monday, August 11, 2008 from 6:30-8:30 p.m. in the Freedom Elementary School Cafeteria, at 575 East Citrus, Farmersville, California. The second workshop was held on Tuesday, August 12, 2008 from 6:30-8:30 p.m. at the Woodlake Veterans Memorial Building, at 355 North Acacia Street in Woodlake, California. Both workshops covered the same information. Specifically, the workshops addressed the CPUC’s process for reviewing the Proposed Project application and the role of the CEQA environmental review process. Information on how interested parties could most effectively provide input, voice concerns, pose questions, and become involved during the process was also addressed at each workshop. At the end of each workshop, a brief question and answer session was held to address questions related to the CPUC and CEQA processes.

On August 22, 2008, the CPUC published and distributed a Notice of Preparation (NOP) to advise interested local, regional, and State agencies, Native American tribal organizations, and interested public that an EIR would be prepared for the Proposed Project. The NOP solicited both written and verbal comments on the EIR’s scope during a 30-day comment period and provided information on the forthcoming public scoping meetings. Additionally, the NOP presented the background, purpose, description, and location of the Proposed Project, potential issues to be addressed in the EIR, and contact information for additional information regarding the project.

In addition to the NOP, the CPUC published legal advertisements in English and Spanish in The Fresno Bee on August 26 and September 13, 2008; in English and in Spanish in the Foothills Sun-Gazette on August 27 and September 10, 2008; in English and Spanish in the Visalia Times-Delta on August 22 and September 12, 2008; and in Spanish in El Sol on August 22 and September 12, 2008.

The CPUC conducted two scoping meetings to solicit verbal comments on the scope of the EIR. The first meeting was held Wednesday, September 17, 2008 from 6:30-8:30 pm in the Freedom

Elementary School Cafeteria, at 575 East Citrus, Farmersville, California. The second meeting was held Thursday, September 18, 2008 from 6:30-8:30 pm at the Woodlake Veterans Memorial Building, at 355 North Acacia Street in Woodlake, California.

During the public scoping meetings held on September 17 and 18, 2008, participants were able to comment on the scope of issues to be included in the EIR for the Proposed Project. Written comments were also collected throughout the public comment period. There were 44 oral comments in the public scoping meetings, and 96 letters or e-mails were received during the scoping period. Appendix A to this EIR contains the Scoping Report, which includes a copy of the NOP, the NOP mailing list, a detailed description of all verbal and written comments received, a description of comments that are not within the scope of CEQA, transcripts of the oral comments, and copies of the written comments.

ES.1.3 Areas of Controversy / Public Scoping Issues

Private citizens, homeowners and local businesses provided the majority of the comments during the scoping process. In addition, comments were received from the following organizations and government agencies:

- California Department of Transportation
- California Department of Fish and Game
- San Joaquin Valley Air Pollution Control District
- Kaweah Delta Water Conservation District
- Tulare County Farm Bureau
- Tulare County Resource Management Agency
- City of Visalia
- City of Farmersville
- The Eshom Valley Band of Michahai and Wuksaschi Indians
- Tulare County Agricultural Commission
- Lemon Cove Sanitary District
- Exeter Union High School Board of Trustees.

The Scoping Report in Appendix A includes all comments and describes which comments are not within the scope of CEQA. The overarching themes in the written and oral comments received are as follows:

- Impacts on scenic views, especially along Highway 198 which is designated as an Eligible State Scenic Highway;
- Impacts from loss of agricultural land;
- Impacts to air quality from earth disturbance and removal of vegetation;
- Impacts to wildlife and plant life;

- Impacts of greenhouse gas emissions on climate change;
- Impacts to historical and archeological resources;
- Impacts to water quality and water supply in the project area;
- Impacts to the Farmersville General Plan;
- Noise impacts from operation of the transmission lines;
- Impacts to population and housing;
- Impacts on public services and recreation;
- Impacts to current and planned transportation systems;
- Cumulative impacts;
- Ensure that alternatives are adequately addressed; and
- Ensure that perceived inadequacies in the PEA will not be repeated.

ES.2 Alternatives

Alternatives to SCE's Proposed Project are identified and evaluated in accordance with CEQA Guidelines. CEQA Guidelines (Section 15126(a)) state:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.

CEQA Guidelines (Section 15364) define feasibility as:

. . . capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Alternatives to the Proposed Project were presented by SCE in its PEA or developed by the EIR preparers. Particular emphasis was placed on developing feasible alternatives which would reduce impacts to agricultural and visual resources.

In total, the alternatives screening process has culminated in the identification and screening of approximately 11 potential alternatives for SCE's Proposed Project. These alternatives range from routing adjustments for new transmission lines to reconductoring or replacement of existing transmission lines. "Non-wires and system alternatives"¹ are addressed as well.

Alternatives to the Proposed Project were screened according to CEQA guidelines to determine those alternatives to carry forward for analysis in the EIR and alternatives to eliminate from detailed consideration. The alternatives were primarily evaluated according to: (1) whether they would meet most of the basic project objectives; (2) whether they would be feasible considering legal, regulatory and technical constraints; and (3) whether they have the potential to substantially

¹ "Non-wires alternatives" include methods of meeting project objectives that do not require major transmission lines (e.g., renewable energy supplies, conservation and demandside management, etc.).

lessen any of the significant effects of the Proposed Project.² Other factors considered, in accordance with CEQA Guidelines (CEQA Guidelines Section 15126.6(f)), were site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, jurisdictional boundaries, and proponent's control over alternative sites. Economic factors or costs of the alternatives (beyond economic feasibility) were not considered in the screening of alternatives since CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives or would be more costly" (CEQA Guidelines Section 16126.6(b)).

The detailed results of the alternatives screening analysis are contained in Chapter 3 of the EIR. Provided below are summary descriptions of the alternatives which meet the basic project objectives, lessen significant impacts, and are feasible, and were therefore were carried forward for further analysis. Figure ES-2 illustrates the general alignment of the three alternatives compared to the Proposed Project. Section 3.5, *Alternatives Eliminated from Full EIR Evaluation*, provides information related to other alternatives considered and the rationale for elimination from further consideration.

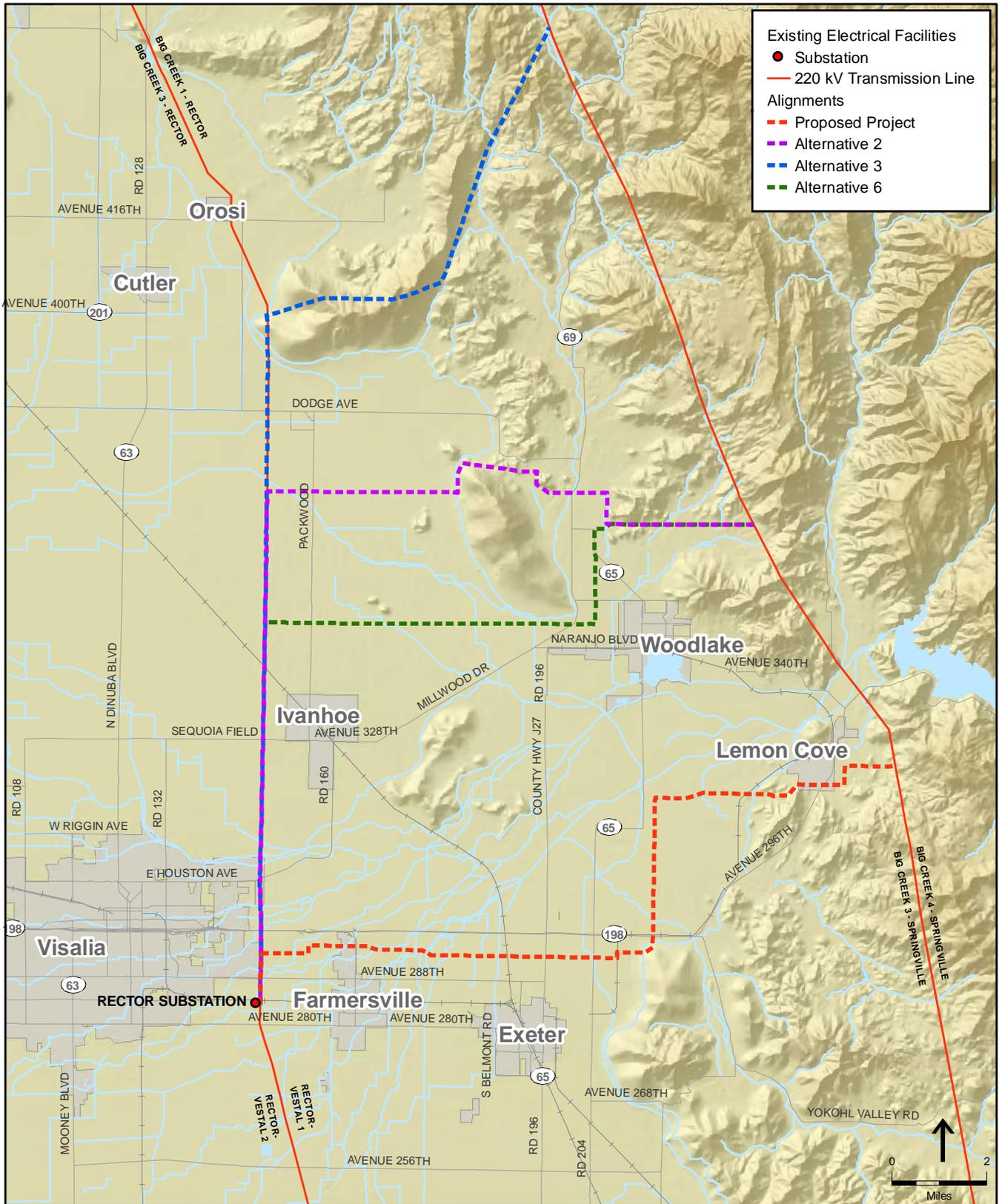
ES.2.1 Alternatives Fully Evaluated in this EIR

Alternative 2

Description. The Alternative 2 alignment proceeds north from the Rector substation within the existing SCE ROW. At Structure #7, the Alternative 2 alignment would continue north in the existing ROW for 9.7 miles past the point where the Proposed Project turns east. At mile 10.8, Alternative 2 turns east for 3.5 miles. From Mile 14.3 to Mile 15.0, the alignment turns north to parallel Road 176 until Avenue 376. The alignment then proceeds east, paralleling Avenue 376 and then southeast through a saddle along the base of Colvin Mountain until Road 194. From mile 17.3 to mile 17.9 the alignment extends south and then southeast until Road 196. From there, the alignment extends east for approximately 1.2 miles and then south for approximately 0.6 miles. At mile 19.7, the alignment turns east along the base of Lone Oak Mountain and continues east until it reaches the existing Big Creek 3-Springville 220 kV transmission line at a point approximately 52 miles south of the Big Creek Powerhouse No. 3. The total length of Alternative 2 would be approximately 23 miles.

Rationale for Full Analysis. This alternative would meet the basic project objectives and would meet all legal, regulatory, and technical feasibility criteria. It would affect fewer walnut orchards than the Proposed Project. However, this alternative would result in potential new impact to additional sensitive biological resources (i.e., Critical Habitat).

² At the screening stage, it is neither possible nor legally required to evaluate all of the impacts of the alternatives in comparison to the Proposed Project with absolute certainty, nor is it possible to quantify impacts. However, it is possible to identify elements of an alternative that are likely to be the sources of impact and to relate them, to the extent possible, to general conditions in the subject area.



SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure ES-2
Proposed Project Overview

Alternative 3

Description. Similar to the Proposed Project, the first 1.1 miles of this alignment would be constructed within existing ROW. However, at Structure #7, the Alternative 3 alignment would continue north in the existing ROW, whereas the Proposed Project would head east. The alignment proceeds north from Rector Substation for approximately 14.6 miles within the existing SCE ROW. At mile 14.6 (approximately 400 feet south of the Friant-Kern Canal), the alignment turns east on Stokes Mountain, leaving the existing SCE ROW. The alignment crosses Stokes Mountain for approximately 3 miles. The alignment then descends from the Stokes Mountain ridgeline (1 mile) and turns northeast to parallel the Stokes Mountain/Stone Corral Canyon interface for approximately 4 miles. The alignment then crosses Boyd Drive and continues in the same northeasterly direction to crest the Goldstein Peak ridgeline at Mile 23. The alignment then descends into the Rattlesnake Creek Valley until it reaches the existing Big Creek 3-Springville 220 kV transmission line at a point approximately 40 miles south of Big Creek Powerhouse No. 3. The total length of Alternative 3 would be approximately 24.3 miles.

Rationale for Full Analysis. This alternative would meet the basic project objectives and would meet all legal, regulatory, and technical feasibility criteria. It would affect fewer citrus and walnut orchards than the Proposed Project. However, this alternative would result in potential new impacts on northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve as well as on jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands.

Alternative 6

Description. Alternative 6 heads due north, following the existing SCE ROW from the Rector Substation for approximately 8.1 miles, traversing residential areas, orchards, field crops and row crops. At mile 8.1 the alignment turns due east for approximately 6.9 miles, crossing predominantly orange orchards as well as other fruit orchards. At mile 15 the alignment turns north for 2.0 miles passing through orange orchards and some field and row crops. At mile 17 the alignment would head east and then northeast for approximately 0.3 miles where it would begin to follow the same alignment as Alternative 2 for approximately 3.2 miles until it reached the existing Big-Creek 3-Springville 220 kV transmission line at a point approximately 52 miles south of Big Creek Powerhouse No. 3. The total length of Alternative 6 would be approximately 20.5 miles.

Rationale for Full Analysis. This alternative would meet the basic project objectives and would meet all legal, regulatory, and technical feasibility criteria. It would affect fewer walnut orchards than the Proposed Project. However, this alternative would result in potential new impact to additional sensitive biological resources (i.e., Critical Habitat).

No Project Alternative

Description. In addition to the alternatives described above, the EIR evaluates the No Project Alternative, in accordance with CEQA requirements. CEQA Guidelines [Section 15126.6(e)], state that the No Project Alternative must include (a) the assumption that conditions at the time of the

Notice of Preparation (i.e., baseline environmental conditions) would not be changed since the Proposed Project would not be installed, and (b) the events or actions that would be reasonably expected to occur in the foreseeable future if the project were not approved.

Under this alternative, the Proposed Project would not be implemented and the reliability issues would continue.

ES.3 Environmental Impacts and Mitigation Measures

ES.3.1 Impact Assessment Methodology

The analysis of environmental impacts is based upon the environmental setting applicable to each resource/issue and the manner in which the construction, operation and maintenance of the Proposed Project or alternatives would affect the environmental setting and related resource conditions. In accordance with CEQA requirements and guidelines, the impact assessment methodology also considers the following three topics: (1) the regulatory setting, and whether the Proposed Project or alternatives would be consistent with adopted federal, State and Local regulations and guidelines, (2) growth-inducing impacts, and (3) cumulative impacts. Regulatory compliance issues are discussed in each resource/issue area section. The EIR document is organized according to the following major issue area categories:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, Seismicity and Mineral Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Planning and Policies
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

In order to provide for a comprehensive and systematic evaluation of potential environmental consequences to the resource/issue areas, the environmental impact assessments for the Proposed Project and alternatives are based upon a classification system, with the following four associated definitions:

- Class I:** Significant impact; cannot be mitigated to a level that is not significant
- Class II:** Significant impact; can be mitigated to a level that is not significant
- Class III:** Adverse impact, less than significant
- Class IV:** Beneficial impacts.

ES.3.2 Applicant Proposed Measures

SCE proposes the following Applicant Proposed Measures (APMs) to minimize impacts to the biological and cultural resources from implementation of the Proposed Project. The impact analysis in this EIR assumes that these APMs would be implemented as part of the Proposed Project; however, if an APM would not adequately mitigate a potential project impact, a new mitigation measure was developed.

APM-BIO-01: Elderberry Avoidance. The elderberry avoidance guidelines of the USFWS (1999b) would be followed. At a minimum, all ground-disturbing activities should be avoided within 15 feet of any mature elderberries with basal stem diameters of 1 inch or greater. If elderberry plants with stems having a diameter of 1 inch or greater cannot be avoided, the USFWS would be consulted to develop mitigation measures appropriate to the type of impact.

APM-CUL-01: Documentation and Recordation of Affected Components of the Big Creek Hydroelectric System Historic District. SCE shall document the affected components of the BCHSHD to National Park Service Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) Level II or Level III standards prior to their removal.

ES.3.3 Mitigation Measures

The EIR describes feasible measures that could minimize significant adverse impacts (CEQA Guidelines Section 15226.4). Within each issue area, mitigation measures are recommended where environmental effects could be substantially minimized. The mitigation measures recommended by this study have been identified in the impact assessment sections of the EIR and are presented in Mitigation Monitoring, Reporting, and Compliance Program in Chapter 8.

ES.3.4 Findings

An overview of environmental impacts by resource area is provided below based on the detailed impact finding and mitigation measures for the Proposed Project and alternatives provided in Chapter 4, *Environmental Analysis*. Tables ES-4 and ES-5, at the end of this Executive Summary, provide a more detailed summary of all the environmental impacts and mitigation measures for the Proposed Project and alternatives.

Less than Significant and Less than Significant with Mitigation

For the Proposed Project and alternatives, based on technical review and evaluation against the environmental and regulatory setting, the following environmental impacts were determined to be less than significant or less than significant with mitigation (i.e., Class III and Class II, respectively).

- Aesthetics
- Air Quality
- Geology, Soils, Seismicity and Mineral Resources
- Hazards and Hazardous Materials
- Noise
- Population and Housing
- Public Services
- Recreation

- Hydrology and Water Quality
- Land Use, Planning and Policies
- Transportation and Traffic
- Utilities and Service Systems

Significant Unmitigable

As summarized in Table ES-2, environmental impacts would be significant and unmitigable (Class I), even with implementation of feasible mitigation measures, in the following areas:

- Agricultural (Proposed Project and Alternatives 2, 3, and 6)
- Biological (Alternative 3 Only)
- Cultural (Proposed Project and Alternatives 2, 3, and 6)

ES.4 Summary Comparison of the Proposed Project and Alternatives

ES.4.1 Methodology

CEQA requires identification of an environmentally superior alternative, but does not provide specific direction regarding the methodology of alternatives comparison. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and permanent loss of habitat/agricultural lands). Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less than significant levels are considered to be less important.

The methodology used to compare alternatives in this EIR started with identification of alternatives. Based on alternatives suggested during scoping, an intensive evaluation process was completed that resulted in the determination that the EIR would analyze three alternative alignment variations. A No Project alternative was also identified. The second step required assessment of the environmental impacts of the Proposed Project and alternatives. The third step was the comparison of the impacts of each alternative to those of the Proposed Project to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project alternative.

Although this comparison focuses on the most important issue areas (e.g., agricultural resources and biological resources), determining an environmentally superior alternative is difficult because of the many factors that must be balanced. While the EIR identifies an environmentally superior alternative, it is possible that the Commission could balance the importance of each impact area differently and reach a different conclusion.

ES.4.2 Summary of Significant (Class I) Unmitigable Impacts

As discussed above in Table ES-2, the Proposed Project would result in significant and unmitigable impact to agricultural and cultural resources. These significant unmitigable impacts were also identified for each of the three alternatives. Alternative 3 would result in significant and unmitigable impacts to biological resources.

**TABLE ES-2
SUMMARY OF SIGNIFICANT UNMITIGABLE (CLASS I) ENVIRONMENTAL IMPACTS
OF THE PROPOSED PROJECT AND ALTERNATIVES**

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 31.1 acres of Farmland (e.g., 16.1 acres of Prime Farmland, 0.7 acres of Farmland of Statewide Importance, and 14.3 acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.9 acres of Farmland (e.g., 9.5 acres of Prime Farmland, 0.6 acres of Farmland of Statewide Importance, and 13.8 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 16.7 acres of Farmland (e.g., 6.6 acres of Prime Farmland, 0.9 acres of Farmland of Statewide Importance, and 9.2 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30.7 acres of Farmland (6.7 acres of Prime Farmland, 24.0 acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

ES.4.3 Environmentally Superior Alternative

Table ES-3 summarizes the environmental impact conclusions of the Proposed Project and alternatives. Implementation of the Proposed Project and all three alternatives would result in significant unmitigable (Class I) impact on cultural resources (i.e., the Big Creek Hydroelectric System Historic District). Although impacts to the Historic District would be of varying degrees (i.e., Alternative 3 would impact more features associated with the Historic District than the Proposed Project), the majority of the Historic District would remain intact; therefore, impacts of varying degree between alternatives is not material enough to determine a preferred alternative from a cultural resources perspective.

However, impacts to agricultural resources do vary enough to determine a preferred alternative from an agricultural resources perspective. While impacts on agricultural resources would remain significant and unmitigable, Alternative 3 would be preferred as it would impact only 16.7 acres of Farmland compared to 31.1 for the Proposed Project. Moreover, Alternative 3 would result in conversion of only 12 acres of Farmland that supports walnut orchards from production while the Proposed Project would result in conversion of 29 acres.

While Alternative 3 would result in the least impacts on agricultural resources, due its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. Therefore, while Alternative 2 would result in slightly greater impacts to Farmland compared to Alternative 3 (but 7.2 acres less than the Proposed Project), it would not result in significant unmitigable impacts to biological resources and therefore is selected here as the Environmentally Superior Alternative.

ES.4.4 Environmentally Superior Alternative vs. No Project Alternative

The Environmentally Superior Alternative (Alternative 2) avoids significant impacts on biological resources and would have minimal long-term impacts on residences or other sensitive land uses. The most significant impact of the No Project Alternative is that SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area would be jeopardized, creating the potential for increased incidence of brown-outs and black-outs in the future which could in turn result in indirect impacts to the provision of public services. Overall, the Environmentally Superior Alternative is preferred over the No Project Alternative, as the No Project Alternative would not meet the basic project objectives.

ES.5 Impact Summary Tables

Tables ES-4 and ES-5 on the following pages summarize all identified impacts of the Proposed Project (Table ES-4) and alternatives (Table ES-5). For each impact, the following information is presented: impact number and title, impact class (Class I, II, III, or IV), applicable mitigation measure, and residual impact (whether significant or less than significant).

**TABLE ES-3
PROPOSED PROJECT VS. ALTERNATIVES
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS**

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Aesthetics	No Preference	No Preference	No Preference	No Preference
Agriculture Resources	Significant unmitigable impacts would include permanent removal of 31.1 acres of Farmland and conversion of 29 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 23.9 acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 16.7 acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production. Preferred because it has the least impacts on agricultural resources	Significant unmitigable impacts would include permanent removal of 30.7 acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.
Air Quality	No Preference	No Preference	No Preference	No Preference
Biological Resources	No Preference	No Preference	Would result in significant unmitigable impacts on northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve as well as to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. Least Preferred	No Preference
Cultural Resources	No Preference	No Preference	No Preference	No Preference
Geology, Soils, Seismicity and Mineral Resources	No Preference	No Preference	No Preference	No Preference
Hazards and Hazardous Materials	No Preference	No Preference	No Preference	No Preference
Hydrology and Water Quality	No Preference	No Preference	No Preference	No Preference
Land Use, Planning, and Policies	No Preference	No Preference	No Preference	No Preference
Noise	No Preference	No Preference	No Preference	No Preference
Population and Housing	No Preference	No Preference	No Preference	No Preference
Public Services	No Preference	No Preference	No Preference	No Preference
Recreation	No Preference	No Preference	No Preference	No Preference
Transportation and Traffic	No Preference	No Preference	No Preference	No Preference
Utilities and Service Systems	No Preference	No Preference	No Preference	No Preference

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT**

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Aesthetics			
4.1-1: Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	II	4.1-1a: Treat surfaces with appropriate colors, finishes, and textures 4.1-1b: Use non-specular and non-reflective materials	Less than significant Less than significant
4.1-2: Temporary visual impacts from construction staging areas	II	4.1-2: Reduce visibility of staging areas	Less than significant
4.1-3: Temporary visual impacts from construction pulling/splicing sites	II	4.1-3: Clean up and restore construction sites to preconstruction conditions	Less than significant
4.1-4: Temporary visual impacts from substation modifications	III	None required	Less than significant
4.1-5: Degrade existing visual character	II	4.1-5: Implement Mitigation Measure 4.1-1	Less than significant
4.1-6: Temporary impacts to nighttime views from construction night lighting	II	4.1-6: Reduce construction night lighting impact	Less than significant
4.1-7: Create new sources of glare	II	4.1-7: Implement Mitigation Measure 4.1-1b	Less than significant
Agriculture Resources			
4.2-1: Temporary impacts to designated Farmland during construction	II	4.2-1a: Implement measures to preserve soil structure 4.2-1b: Implement measures to minimize impacts during growing season and supply replacement crops upon completion of construction	Less than significant Less than significant
4.2-2: Permanent removal of designated Farmland	I	4.2-2: Obtain conservation easements	Significant unmitigable
4.2-3: Conflict with existing zoning for agricultural use, or a Williamson Act contract	III	None required	Less than significant
4.2-4: Conversion of additional Farmland to non-agricultural use	I	4.2-4: Implement Mitigation Measure 4.2-2	Significant unmitigable
4.2-5: Impacts to existing irrigation and other ancillary systems required for farming productivity	II	4.2-5: Include measures in construction plans to ensure that existing irrigation and drainage systems operate effectively	Less than significant

^a Impact Classes: Class I (significant unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Air Quality			
4.3-1: Construction emissions of criteria pollutants	Class II	4.3-1a: Submit an Air Impact Assessment to the San Joaquin Valley Air Pollution Control District 4.3-1b: Implement dust control measures during construction	Less than significant
4.3-2: Criteria pollutant emissions from operation and maintenance	Class III	None required	Less than significant
4.3-3: Fugitive dust emissions from permanently disturbed land	Class II	4.3-3: Implement dust control measures on permanently disturbed lands and access/spur roads	Less than significant
4.3-4: Cumulatively considerable emissions of ozone precursors during construction	Class II	4.3-4: Implement Mitigation Measure 4.3-1a	Less than significant
4.3-5: Cumulatively considerable emissions of particulate matter during construction	Class II	4.3-5: Implement Mitigation Measure 4.3-1b	Less than significant
4.3-6: Cumulatively considerable criteria pollutant emissions during operation and maintenance	Class III	None required	Less than significant
4.3-7: Expose sensitive receptors to harmful concentrations of criteria pollutants during construction	Class II	4.3-7: Implement Mitigation Measure 4.3-1a and 4.3-1b	Less than significant
4.3-8: Generate short-term and long-term emissions of greenhouse gases	Class II	4.3-8a: Implement GHG emission offset program 4.3-8b: Dispose of green waste via Tulare County's Wood and Green Waste Program 4.3-8c: Fund and implement a tree replacement program with the Urban Tree Foundation of Visalia, California	Less than significant
Biological Resources			
4.4-1: Impacts to Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur and spiny-sepaled button celery	Class II	4.4-1a: Conduct rare plant surveys 4.4-1b: Consult with agencies and avoid and minimize impacts, and compensate for impacts that cannot be avoided 4.4-1c: Develop and implement a noxious weed and invasive plant control plan	Less than significant
4.4-2: Impacts to valley elderberry longhorn beetle and its habitat	Class II	4.4-2a: Conduct a focused elderberry shrub survey 4.4-2b: Consult with agencies and avoid and minimize impacts, and compensate for impacts to elderberry shrubs that cannot be avoided	Less than significant

TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Biological Resources (cont.)			
4.4-3: Impacts to existing populations, and habitat for Swainson's hawk and golden eagle	Class II	4.4-3a: Implement measures to avoid disturbing Swainson's hawk and golden eagle nests during construction and monitor golden eagle nesting sites during maintenance 4.4-3b: Acquire and/or restore foraging habitat for Swainson's hawk	Less than significant
4.4-4: Impacts to protected nesting migratory birds	Class II	4.4-4: Avoid impacts to nesting raptors or other protected migratory birds	Less than significant
4.4-5: Impacts to burrowing owl	Class II	4.4-5: Conduct preconstruction surveys and avoid impacts to burrowing owls	Less than significant
4.4-6: Impacts to San Joaquin kit fox and its habitat	Class II	4.4-6: Implement San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide habitat for San Joaquin kit fox	
4.4-7: Impacts to raptors as a result of electrocution or collision	Class II	4.4-7: Follow Avian Power Line Interaction Committee Guidelines when designing transmission lines	Less than significant
4.4-8: Impacts to riparian habitat, including native oak trees	Class II	4.4-8: Avoid riparian vegetation and native oak trees where feasible through project design; compensate through restoration when avoidance is not feasible	Less than significant
4.4-9: Impacts to jurisdictional waters of the United States and waters of the States, including drainages and seasonal wetlands	Class II	4.4-9a: Perform a wetland delineation and minimize disturbance to wetlands 4.4-9b: Offset impacts when impacts to wetlands cannot be avoided	Less than significant
4.4-10: Impacts to valley oaks or protected landmark trees in the City of Visalia	Class II	4.4-10: Implement Best Management Practices to minimize impacts to trees	Less than significant
Cultural Resources			
4.5-1: Adverse impacts to elements of the Big Creek Hydroelectric System Historic District	Class I	Applicant Proposed Measure: Documentation and recordation according to the Historic American Engineering Record standards	Significant unmitigable
4.5-2: Impacts to known and unknown historic resources	Class II	4.5-2a: Draft and complete a Historic Properties Treatment Plan 4.5-2b: Conduct additional cultural resources surveys	Less than significant
4.5-3: Alter historic agricultural landscape	Class III	None required	Less than significant
4.5-4: Impacts to known and unknown archeological resources	Class II	4.5-4a: Identify the locations of known archeological sites 4.5-4b: Cease work if subsurface archaeological resources are discovered during ground-disturbing activities	Less than significant
4.5-5: Impacts to paleontological resources	Class II	4.5-5: Conduct a paleontological assessment prior to construction	Less than significant

TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Cultural Resources (cont.)			
4.5-6: Disturbance of human remains	Class II	4.5-6: Halt work if remains are uncovered and contact Tulare County coroner	Less than significant
Geology, Soils, Seismicity and Mineral Resources			
4.6-1: Hazards from ground surface rupture	Class III	None required	Less than significant
4.6-2: Effects from seismic ground shaking	Class III	None required	Less than significant
4.6-3: Effects from seismic-related ground failure, including liquefaction	Class III	None required	Less than significant
4.6-4: Effects from landslides	Class III	None required	Less than significant
4.6-5: Soil erosion	Class II	4.6-5: Implement Mitigation Measure 4.8-1 and Mitigation Measure 4.2-1a	Less than significant
4.6-6: On- or off-site landslides, lateral spreading, subsistence, liquefaction or collapse	Class III	None required	Less than significant
4.6-7: Risk from expansive soil	Class III	None required	Less than significant
Hazards and Hazardous Materials			
4.7-1: Use of hazardous materials during construction	Class II	4.7-1a: Implement Best Management Practices 4.7-1b: Develop and implement Hazardous Substance Control and Emergency Response Plan 4.7-1c: Develop and implement Health and Safety Plan 4.7-1d: Develop and implement Worker Environmental Awareness Program 4.7-1e: Provide Emergency Spill Supplies and Equipment	Less than significant
4.7-2: Blasting activities	Class II	4.7-2: Develop and implement a Blasting Safety Plan	Less than significant
4.7-3: Release previously unidentified hazardous materials	Class II	4.7-3a: Include provisions in Hazardous Substance Control and Emergency Response Plan to address hazardous materials encountered during construction 4.7-3b: Develop and implement a Soil Sampling and Analysis Plan	Less than significant
4.7-4: Release of hazardous materials within one-quarter mile of an existing school	Class II	4.7-4: Implement Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2	Less than significant

TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Hazards and Hazardous Materials (cont.)			
4.7-5: Release of residual contamination at Rector Substation	Class II	4.7-5: Implement Mitigation Measures 4.7-3a	Less than significant
4.7-6: Safety hazard to aerial spray applicators	Class II	4.7-6: Provide written notification to all aerial applicators stating when new transmission lines would be erected.	Less than significant
4.7-7: Interfere with an emergency response or evacuation plan	Class II	4.7-7: Implement Mitigation Measures 4.14-1b and 4.12-2	Less than significant
4.7-8: Construction related wildland fires	Class II	4.7-8: Keep a water tank and/or water truck sited/available in the project area during construction	Less than significant
4.7-9: Operation related wildland fires	Class III	None required	Less than significant
4.7-10: Electric field interference with cardiac pacemakers.	Class III	None required	Less than significant
4.7-11: Electric shock from induced currents	Class II	4.7-11a: Identify objects near proposed ROW that have potential for induced voltages and implement grounding where applicable 4.7-11b: Inventory groundwater wells near proposed ROW and relocate wells if necessary	Less than significant
Hydrology and Water Quality			
4.8-1: Soil erosion, pollution, and sediment in surface waterways	Class II	4.8-1: Implement erosion control measures	Less than significant
4.8-2: Release previously contaminated groundwater	Class II	4.8-2: Implement inspection and test measures	Less than significant
4.8-3: Affect flow of springs or shallow groundwater	Class II	4.8-3: Implement Mitigation Measure 4.8-1 (above)	Less than significant
4.8-4: Impede or redirect flood flows	Class III	None required	Less than significant
Land Use, Planning, and Policies			
4.9-1: Physically divide an established community	Class III	None required	Less than significant
4.9-2: Conflict with land use plans, policies or regulations	Class III	None required	Less than significant
Noise			
4.10-1: Substantial vibration from blasting	Class II	4.10-1: Develop and implement Blasting Plan for construction activities	Less than significant
4.10-2: Substantial vibration from construction	Class III	None required	Less than significant
4.10-3: Ambient noise levels from corona discharge	Class III	None required	Less than significant
4.10-4: Construction noise	Class II	4.10-4a: Noise reduction and suppression techniques 4.10-4b: Develop nighttime noise reduction plan	Less than significant

**TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT**

Impact	Impact Class^a	Mitigation Measure(s)	Residual Impact
Noise (cont.)			
4.10-5: Blasting noise	Class II	4.10-5: Air blast pressure methods and air blast monitoring in Blasting Plan	Less than significant
4.10-6: Ambient noise levels from inspection and maintenance	Class III	None required	Less than significant
Population and Housing			
4.11-1: Substantial population growth	Class III	None required	Less than significant
4.11-2: Displaced existing housing	Class III	None required	Less than significant
4.11-3: Displaced people	Class III	None required	Less than significant
Public Services			
4.12-1: Demand for fire protection services	Class II	4.12-1a: Implement Mitigation Measure 4.7-1c (Section 4.7, Hazards and Hazardous Materials) 4.12-1b: Implement Mitigation Measure 4.7-8 (Section 4.7, Hazards and Hazardous Materials)	Less than significant
4.12-2: Emergency vehicle response times	Class II	4.12-2: Coordinate with emergency service providers	Less than significant
4.12-3: Demand for police services	Class II	4.12-3a: Precautionary measures to prevent vandalism 4.12-3b: Traffic control for public protection 4.12-3c: Public safety measures	Less than significant
4.12-4: Schools	Class III	None required	Less than significant
4.12-5: Other public facilities	Class III	None required	Less than significant
Recreation			
4.13-1: Physical deterioration of recreational facilities	Class III	None required	Less than significant
4.13-2: Construction or expansion of recreational facilities	Class III	None required	Less than significant
Transportation and Traffic			
14.4-1: Construction effects on traffic	Class II	4.14-1a: Encroachment permits 4.14-1b: Prepare/implement traffic management plan 4.14-1c: Minimize overlap with other local construction	Less than significant

TABLE ES-4 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE PROPOSED PROJECT

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact
Transportation and Traffic (cont.)			
4.14-2: Construction traffic safety hazards	Class II	4.14-2: Implement Mitigation Measure 4.14-1b	Less than significant
4.14-3: Construction delays for emergency vehicles	Class II	4.14-3: Implement Mitigation Measures 4.14-1b and 4.12-2.	Less than significant
4.14-4: Inadequate Parking	Class III	None required	Less than significant
Utilities and Service Systems			
4.15-1: Conflict with wastewater treatment requirements	Class III	None required	Less than significant
4.15-2: Result in new/expanded wastewater treatment facilities	Class III	None required	Less than significant
4.15-3: Result in new/expanded stormwater drainage facilities	Class III	None required	Less than significant
4.15-4: Result in new/expanded water supply entitlements	Class III	None required	Less than significant
4.15-5: Exceed wastewater treatment facility capacity	Class III	None required	Less than significant
4.15-6: Exceed permitted landfill capacity	Class III	None required	Less than significant
4.15-7: Comply with solid waste regulations	Class III	None required	Less than significant
4.15-8: Inadvertently contact underground utility lines	Class III	None required	Less than significant

**TABLE ES-5
SUMMARY OF IMPACTS AND MITIGATION FOR THE ALTERNATIVES**

Impact	Impact Class ^a	Applicable Alternatives	Mitigation Measure(s)	Residual Impact
Aesthetics				
No unique impacts to aesthetic resources have been identified for the alternatives; however for all alternatives, Mitigation Measure 4.1-1a applies to different structures as noted under the Mitigation Measure column (right). Other impacts and mitigation measures are the same as for the Proposed Project.	Class II	ALT2 ALT3 ALT6	For ALT2: SR 198 (Structures #9 and #10), SR 216 (Structures #14, #15, and #16), and SR 245 (Structures #95, #96, and #97) For ALT3: SR 198 (Structures #9 and #10), SR 216 (Structures #14, #15, and #16) For ALT6: SR 198 (Structures #9 and #10), SR 216 (Structures #14, #15, and #16), and SR 245 (where Alternative 6 runs parallel for approximately one-half mile)	Less than significant
Agriculture Resources				
No unique impacts to agricultural resources have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Air Quality				
No unique impacts to air quality have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Biological Resources				
Except as noted below, Biological Resource impacts and mitigation measures are the same as for the Proposed Project.				
4.4-___-1: Construction impacts to vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot toad	Class II	ALT2, ALT3, ALT6	4.4-___-1: Minimize impacts on special status vernal pool wildlife species by avoiding habitat whenever possible, and by avoiding and minimizing direct and indirect impacts on vernal pools; implement Proposed Project Mitigation Measure 4.4-9a and 4.4-9b	Less than significant
4.4-ALT3-2: Construction impacts to riparian habitat in the St. Johns River	Class II	ALT3	4.4-ALT3-2: Restore riparian habitat in areas where it is disturbed and monitor long-term survival of plantings	
4.4-ALT3-3: Construction impacts to vernal pool habitat in areas within the Stone Corral Ecological Reserve	Class I	ALT3	4.4-ALT3-3a: Implement Proposed Project Mitigation Measure 4.4-9a 4.4-ALT3-3b: Implement Proposed Project Mitigation Measure 4.4-9b	Significant unmitigable
4.4-___-2: Construction impacts to riparian habitat at St. Johns River and potential impacts to northern claypan vernal pool habitat between Colvin Mountain and Big Creek-Springville lines	Class II	ALT2, ALT6	4.4-___-2: Restore riparian habitat in areas where it is disturbed and monitor long-term survival of plantings	Less than significant

^a Impact Classes: Class I (significant unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

TABLE ES-5 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE ALTERNATIVES

Impact	Impact Class^a	Applicable Alternatives	Mitigation Measure(s)	Residual Impact
Biological Resources (cont.)				
4.4-ALT3-2: Construction impacts to riparian habitat at St. Johns River and potential impacts to vernal pool habitat in areas within the Stone Corral Ecological Reserve	Class I	ALT3	4.4-ALT3-2: Restore riparian habitat in areas where it is disturbed and monitor long-term survival of plantings	Significant unmitigable
Cultural Resources				
Except as noted below, Cultural Resource impacts and mitigation measures are the same as for the Proposed Project.				
4.5-___-1: Adverse impacts to known and unknown historic resources	Class II	ALT2, ALT3, ALT6	4.5-___-1a: Implement Proposed Project Mitigation Measure 4.5-2a. 4.5-___-1b: Implement Proposed Project Mitigation Measure 4.5-2b.	Less than significant
4.5-___-2: Adverse impacts to archeological resources	Class II	ALT2, ALT3, ALT6	4.5-___-2a: Implement Proposed Project Mitigation Measure 4.5-4a. 4.5-___-2b: Implement Proposed Project Mitigation Measure 4.5-4b.	Less than significant
Hazards and Hazardous Materials				
Except as noted below, Hazards / Hazardous Materials impacts and mitigation measures are the same as for the Proposed Project.				
HAZ-ALT6-1: Impact airport operations at Woodlake Airport	Class III	ALT6	None required	Less than significant
Hydrology and Water Quality				
No unique impacts to hydrology and water quality have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Land Use, Planning, and Policies				
No unique impacts to land use and planning have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Noise				
No unique impacts to noise have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Public Services				
No unique impacts to public services have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				

**TABLE ES-5 (Continued)
SUMMARY OF IMPACTS AND MITIGATION FOR THE ALTERNATIVES**

Impact	Impact Class ^a	Applicable Alternatives	Mitigation Measure(s)	Residual Impact
Transportation and Traffic				
No unique impacts to transportation and traffic have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				
Utilities and Service Systems				
No unique impacts to utilities and service systems have been identified for the alternatives; impacts and mitigation measures are the same as for the Proposed Project.				

CHAPTER 1

Introduction

1.1 Overview of Proposed Project

Southern California Edison (SCE), in its California Public Utilities Commission (CPUC) application for the San Joaquin Cross Valley Loop Transmission Project (A.08-05-039), filed on May 30, 2008, seeks a Certificate of Public Convenience and Necessity (CPCN) to construct electrical facilities pursuant to CPUC General Order (GO) 131-D. The application includes the Proponent's Environmental Assessment (PEA) (SCE, 2008) prepared pursuant to Rule 2.4 of CPUC's Rules of Practice and Procedure.

Currently SCE owns and operates four 220 kV transmission lines commonly referred to as the Big Creek Corridor. These lines move electricity from the Big Creek Hydroelectric Project south to the Electrical Needs Area which encompasses the cities of Tulare, Visalia, Hanford, Farmersville, Exeter and Woodlake as well as surrounding areas of Tulare and Kings Counties. Two of the lines begin at Big Creek and terminate at the Rector Substation (Big Creek 1-Rector 220 kV transmission line and Big Creek 3-Rector 220 kV transmission line) while the other two lines begin at Big Creek and terminate at the Springville 220/66 kV Substation (Big Creek 3-Springville 220 kV transmission line and Big Creek 4-Springville 220 kV transmission line). In its application, SCE requested authorization to loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation by constructing 18.5 miles of new transmission line and replacing 1.1 miles of existing transmission line. SCE also requested permission to modify the Rector Substation and to remove wave traps and line tuners and install protective relays at the Rector, Springville, Vestal, and Big Creek 3 Substations (collectively, the "Proposed Project").

This Draft EIR has been prepared to consider the potential environmental impacts from the Proposed Project, and to identify and evaluate a reasonable range of alternatives.

1.2 Project Objectives, Purpose and Need

The California Environmental Quality Act (CEQA) Guidelines (Section 15126.6.a) require that a reasonable range of alternatives to the Proposed Project be described, analyzed and feasibly attain most of the basic objectives of the Proposed Project. Therefore, in order to explain the need for the Proposed Project, and to guide in development and evaluation of alternatives, SCE was asked to define its project objectives. SCE identified the objectives for the San Joaquin Cross Valley Loop Transmission Project in its PEA (SCE, 2008) as follows:

- Provide safe and reliable electric service consistent with NERC/WECC and CAISO reliability criteria.
- Provide safe and reliable electric service consistent with SCE's electrical system planning guidelines.
- Increase transmission capacity between the Big Creek Hydroelectric Project and Rector Substation to mitigate overload conditions.
- Reduce the need to interrupt customer electrical service under transmission line outage conditions.
- Minimize the need to reduce Big Creek Hydroelectric Project generation under transmission line outage conditions.
- Minimize electrical service interruption to customers by scheduling the construction of new facilities in an orderly and rational matter.
- Meet project need while minimizing environmental impact.
- Meet project need and construction schedule in a cost effective manner.

According to SCE, construction of the Proposed Project is needed to maintain safe and reliable electric service to customers and to serve forecasted electrical demand in the southeastern portion of the San Joaquin Valley. Historically, the existing 220 kV transmission line configuration within the Big Creek Corridor has met the electrical demand in the Electrical Needs Area. However, growth in demand on the western side of the Big Creek Corridor has exceeded growth in demand on the eastern side, resulting in transmission lines on the western side of the corridor operating at or near capacity while the transmission lines on the eastern side are under utilized. The unequal distribution of load has resulted in overloads on the 220 kV transmission lines serving Rector Substation from the Big Creek Hydroelectric Project. The need to loop the existing Big Creek 3-Springville transmission line into the Rector Substation was identified by the California Independent System Operation Corporation (CAISO) as the most economically feasible upgrade to reduce the possibility of overloads on the existing transmission lines in the Big Creek Corridor.

1.3 Agency Use of This Document

Section 15124(d) of the State CEQA Guidelines requires that an EIR contain a statement briefly describing the intended uses of the EIR. The State CEQA Guidelines indicate that the EIR should identify the ways in which the Lead Agency and any responsible agencies would use this document in their approval or permitting processes. The following discussion summarizes the roles of the agencies and the intended uses of the EIR.

1.3.1 CPUC Process

Pursuant to Article XII of the Constitution of the State of California, the CPUC is charged with the regulation of investor-owned public utilities, including SCE. The CPUC is the lead State agency for CEQA compliance in evaluation of the SCE's proposed San Joaquin Cross Valley

Loop Transmission Project, and has directed the preparation of this EIR. This EIR will be used by the Commission, in conjunction with other information developed in the Commission's formal record, to act on SCE's application for a CPCN for construction and operation of the Proposed Project. Under CEQA requirements, the CPUC will determine the adequacy of the Final EIR and, if adequate, will certify the document as complying with CEQA. If the Commission approves a project with significant and unmitigable environmental impacts, it must state why in a Statement of Overriding Considerations, which would be included in the Commission's decision on the application.

1.3.2 Other Agencies

Several other State agencies will rely on information in this EIR to inform them in their decision over issuance of specific permits related to project construction or operation. In addition to the CPUC, State agencies such as the Department of Transportation, Department of Fish and Game, Regional Water Quality Control Board, and Office of Historic Preservation would be involved in reviewing and/or approving the project. On the federal level, agencies with potential reviewing and/or permitting authority include the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.

No local discretionary (e.g., use) permits are required, since the CPUC has preemptive jurisdiction over the construction, maintenance, and operation of SCE facilities in California. SCE would still have to obtain all ministerial building and encroachment permits from local jurisdictions, and the CPUC's GO 131-D requires SCE to comply with local building, design, and safety standards to the greatest degree feasible to minimize project conflicts with local conditions. The CPUC's authority does not preempt special districts, such as Air Quality Management Districts, or other State agencies or the federal government. SCE would obtain permits, approvals, and licenses as needed from, and would participate in reviews and consultations as needed with, federal, State, and local agencies as shown in Table 1-1.

1.4 Public Review and Comment

1.4.1 Education Outreach

In response to letters of concern and comments from the public regarding the Proposed Project, the CPUC held two educational workshops in Tulare County. The first workshop was held on Monday, August 11, 2008 from 6:30-8:30 p.m. in the Freedom Elementary School Cafeteria, at 575 East Citrus, Farmersville, California. The second workshop was held on Tuesday, August 12, 2008 from 6:30-8:30 p.m. at the Woodlake Veterans Memorial Building, at 355 North Acacia Street in Woodlake, California. Both workshops covered the same information. Specifically, the workshops addressed the CPUC's process for reviewing the Proposed Project application and the role of the CEQA environmental review process. Information on how interested parties could most effectively provide input, voice concerns, pose questions, and become involved during the process was also addressed at each workshop. At the end of each workshop, a brief question and answer session was held to address questions related to the CPUC and CEQA processes.

**TABLE 1-1
SUMMARY OF POTENTIAL PERMIT REQUIREMENTS**

Agency	Permits and Other Requirements	Jurisdiction/Purpose
Federal Agencies		
U.S. Fish and Wildlife Service	Section 7 Consultation, Endangered Species Act	Construction, operation, and maintenance on land that may affect a federally listed species or its habitat; incidental take authorization (if required)
U.S. Army Corps of Engineers	Section 10 of the Rivers and Harbors Act	Construction across Navigable Waters
	Nationwide or Individual Permit (Section 404 of the Clean Water Act)	Construction impacting Waters of the United States, including wetlands
State Agencies		
California Public Utilities Commission	Certificate of Public Convenience and Necessity	Overall project approval and California Environmental Quality Act review
California Department of Fish and Game	Endangered Species Consultation	Construction, operation and maintenance that may affect a state-listed species or its habitat; incidental take authorization (if required)
California Department of Transportation	Encroachment Permit	Construction, operation, and maintenance within, under, or over state highway right-of-way (ROW)
California Regional Water Quality Control Board	National Pollutant Discharge Elimination System Construction Storm water Permit	Storm water discharges associated with construction activities disturbing more than one acre of land
	Section 401 Water Quality Certification (or waiver)	Certifies that project is consistent with state water quality standards
Office of Historic Preservation	Section 106 Review, National Historic Preservation Act	Construction, operation, and maintenance on land that may affect cultural or historic resources
Local Agencies		
City of Visalia City of Farmersville Tulare County	Encroachment Permit (ministerial)	Construction, operation, and maintenance within, under, or over city or county road ROW

1.4.2 Scoping

On August 22, 2008, the CPUC published and distributed a Notice of Preparation (NOP) to advise interested local, regional, and State agencies, Native American tribal organizations, and interested public, that an EIR would be prepared for the Proposed Project. The NOP solicited both written and verbal comments on the EIR's scope during a 30-day comment period and provided information on the forthcoming public scoping meetings. Additionally, the NOP presented the background, purpose, description, and location of the Proposed Project, potential issues to be addressed in the EIR, and contact information for additional information regarding the project.

In addition to the NOP, the CPUC published legal advertisements in English and Spanish in The Fresno Bee on August 26 and September 13, 2008; in English and in Spanish in the Foothills Sun-Gazette on August 27 and September 10, 2008; in English and Spanish in the Visalia Times-Delta on August 22 and September 12, 2008; and in Spanish in El Sol on August 22 and September 12, 2008.

The CPUC conducted two scoping meetings to solicit verbal comments on the scope of the EIR. The first meeting was held Wednesday, September 17, 2008 from 6:30-8:30 pm in the Freedom Elementary School Cafeteria, at 575 East Citrus, Farmersville, California. The second meeting was held Thursday, September 18, 2008 from 6:30-8:30 pm at the Woodlake Veterans Memorial Building, at 355 North Acacia Street in Woodlake, California.

During the public scoping meetings held on September 17 and 18, 2008, participants were able to comment on the scope of issues to be included in the EIR for the Proposed Project. Written comments were also collected throughout the public comment period. There were 44 oral comments in the public scoping meetings, and 96 letters or e-mails were received during the scoping period. Appendix A to this EIR contains the Scoping Report, which includes a copy of the NOP, the NOP mailing list, a detailed description of all verbal and written comments received, a description of comments that are not within the scope of CEQA, transcripts of the oral comments, and copies of the written comments.

The overarching themes of the written and oral comments in the Scoping Report that fall within the purview of the CEQA process are as follows:

- Impacts on scenic views, especially along Highway 198 which is designated as an Eligible State Scenic Highway;
- Impacts from loss of agricultural land;
- Impacts to air quality from earth disturbance and removal of vegetation;
- Impacts to wildlife and plant life;
- Impacts of greenhouse gas emissions on climate change;
- Impacts to historical and archeological resources;
- Impacts to water quality and water supply in the project area;
- Impacts to the Farmersville General Plan;
- Noise impacts from operation of the transmission lines;
- Impacts to population and housing;
- Impacts on public services and recreation;
- Impacts to current and planned transportation systems;
- Cumulative impacts;
- Ensure that alternatives are adequately addressed; and,
- Ensure that perceived inadequacies in the PEA will not be repeated.

1.4.3 Public Comment on the Draft EIR

This Draft EIR is being circulated to local and state agencies and to interested individuals who may wish to review and comment on the report. Written comments may be submitted to the CPUC during the 45-day public review period. Verbal and written comments on this Draft EIR will be accepted via regular mail, fax, and e-mail and at a noticed public meeting (either noticed in this document or under separate cover). All comments received will be addressed in a Response to Comments addendum document, which, together with this Draft EIR, will constitute the Final EIR for the Proposed Project.

This Draft EIR identifies the environmental impacts of the Proposed Project on the existing environment, indicates how those impacts would be mitigated or avoided, and identifies and evaluates alternatives to the Proposed Project. This document is intended to provide the CPUC with the information required to exercise its jurisdictional responsibilities with respect to the Proposed Project, which would be considered at a separate noticed public meeting of the CPUC.

CEQA requires that a Lead Agency shall neither approve nor implement a project as proposed unless the significant environmental impacts have been reduced to an acceptable level. An acceptable level is defined as eliminating, avoiding or substantially lessening significant environmental effects to below a level of significance. If the Lead Agency approves a project, even though significant impacts identified in the final EIR cannot be fully mitigated, the Lead Agency must state in writing the reasons for its action. Findings and a Statement of Overriding Considerations must be included in the record of project approval and mentioned in the Notice of Determination (NOD).

1.5 Reader's Guide to This EIR

This EIR is organized as follows:

Executive Summary. Provides a summary description of the Proposed Project, the alternatives, their respective environmental impacts and the Environmentally Superior Alternative. Also provides a tabulation of the impacts and mitigation measures for the Proposed Project and alternatives.

Chapter 1, Introduction. Provides a discussion of the background, purpose and need for the project, briefly describing the proposed San Joaquin Cross Valley Loop Transmission Project, and outlining the public agency use of the EIR.

Chapter 2, Project Description. Provides a detailed description of the proposed San Joaquin Cross Valley Loop Transmission Project.

Chapter 3, Alternatives and Cumulative Projects. Provides a description of the alternatives screening and evaluation process, description of alternatives considered but eliminated from further analysis and the rationale therefore, and description of the alternatives analyzed in Chapter 4. Also identifies the cumulative projects considered in the analysis of cumulative impacts.

Chapter 4, *Environmental Analysis*. Provides a comprehensive analysis and assessment of impacts (including cumulative impacts) and mitigation measures for the Proposed Project and alternatives, including the No Project Alternative. This section is divided into main sections for each environmental issue area (e.g., Air Quality, Biological Resources, etc.) that contain the environmental settings, impacts, and cumulative effects of the Proposed Project and each alternative.

Chapter 5, *Comparison of Alternatives*. Provides a discussion of the relative advantages and disadvantages of the Proposed Project and the alternatives that were evaluated, and identifies the CEQA Environmentally Superior Alternative.

Chapter 6, *CEQA Statutory Sections*. Provides a discussion of growth-inducing impacts, significant environmental effect that cannot be avoided, irreversible environmental changes, and cumulative impacts.

Chapter 7, *Report Preparers*. Identifies the primary authors of this Draft EIR

Chapter 8, *Mitigation Monitoring, Reporting, and Compliance Plan*. Provides a discussion of the CPUC's mitigation monitoring program requirements for the project as approved by the CPUC.

Appendix A contains the Scoping Report which includes the NOP as well as copies of comments received on the NOP. Other technical appendices are also included in this Draft EIR.

References – Introduction

Southern California Edison (SCE), 2008. *Proponent's Environmental Assessment for the San Joaquin Cross Valley Loop Transmission Project*, May 2008.

CHAPTER 2

Project Description

2.1 Introduction

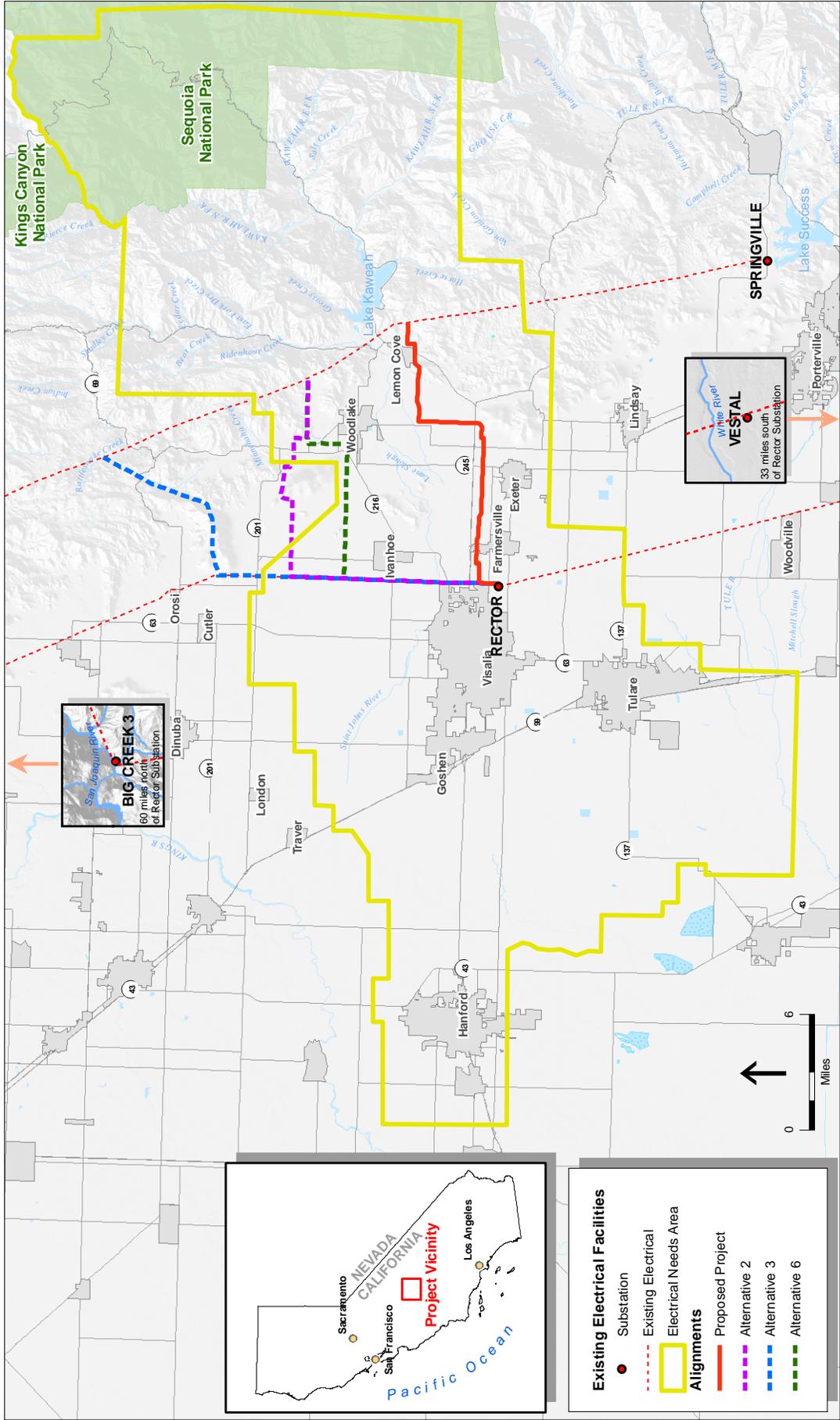
This EIR examines the environmental impacts associated with construction and operation of the proposed Southern California Edison (SCE) San Joaquin Cross Valley Loop Transmission Project (Proposed Project). As described in more detail in the sections below, the Proposed Project would consist of constructing an 18.5-mile long double circuit 220 kilovolt (kV) transmission line, replacing 1.1 miles of existing transmission line, modifying the Rector Substation, and removing wave traps and line tuners and installing additional protective relays at four substations (Rector, Springville, Vestal, and Big Creek 3). The Proposed Project transmission line would occur within 1.1 miles of existing right-of-way (ROW) and 17.4 miles of new ROW. The information presented here was extracted from SCE's Application for CPCN (SCE, 2008a), their Proponent's Environmental Assessment (SCE, 2008b), and their responses to data requests by the EIR team (SCE, 2008c through 2008g, and SCE, 2009). This information is intended to provide a detailed description of project construction, operation and maintenance, serving to provide a common understanding of the project parameters.

2.2 Project Location

The Proposed Project is located in north western Tulare County, California near the cities of Visalia, Farmersville, and Exeter. The Proposed Project transmission line traverses east from the City of Visalia north of the cities of Farmersville and Exeter (Figure 2-1). The Proposed Project generally crosses agricultural lands and scattered rural residences between the Rector substation located southeast of the City of Visalia and the Big Creek 4-Springville existing transmission line located at the western foothills of the Sierra Nevada Mountains. Agriculture in the area consists of orchards (i.e., citrus, walnut, plum, fig), grazing, and row crops (such as hay and alfalfa).

2.3 Existing System

The SCE Rector 220/66 kV System currently serves the Electrical Needs Area which encompasses the cities of Tulare, Visalia, Hanford, Farmersville, Exeter and Woodlake as well as the surrounding areas of Tulare and Kings Counties (Figure 2-1). This system uses electricity generated at facilities located outside of the Electrical Needs Area, including the Big Creek Hydroelectric Project and other facilities located in and south of Kern County. Currently four 220 kV transmission lines commonly referred to as the Big Creek Corridor move electricity from



SOURCE: SOE, 2008; ESRI, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-1
Project Location

the Big Creek Hydroelectric Project to the Electrical Needs Area. Two of the lines begin at Big Creek and terminate at the Rector Substation (Big Creek 1-Rector 220 kV transmission line and Big Creek 3-Rector 220 kV transmission line) while the other two lines begin at Big Creek and terminate at the Springville 220/66 kV Substation (Big Creek 3-Springville 220 kV transmission line and Big Creek 4-Springville 220 kV transmission line). Figure 2-2 illustrates the system as it exists now and as it would exist after construction of the Proposed Project.

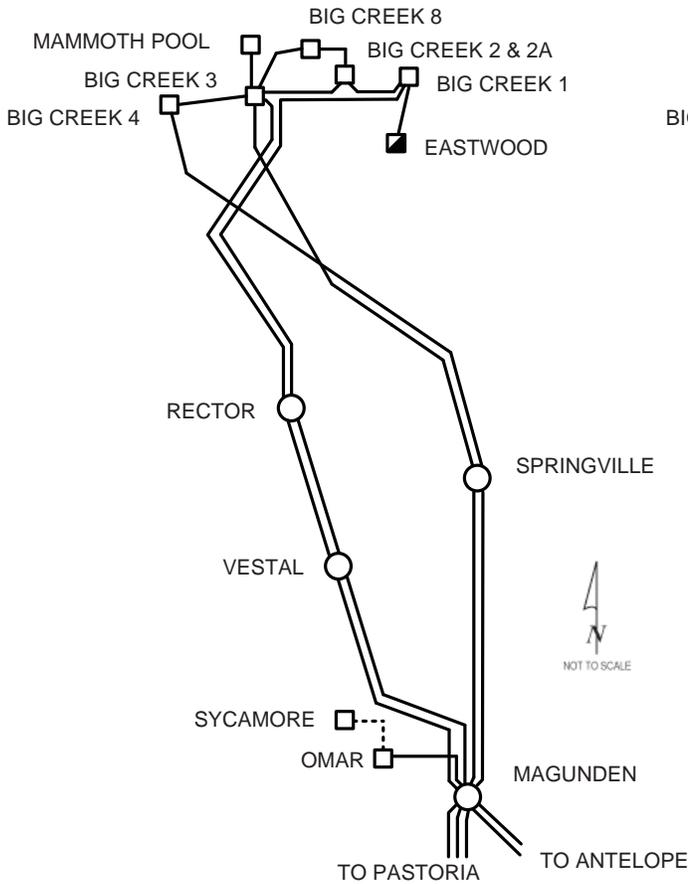
2.4 SCE's Proposed Project

The Proposed Project consists of the following activities; a more detailed description of the individual project components is included in Section 2.5:

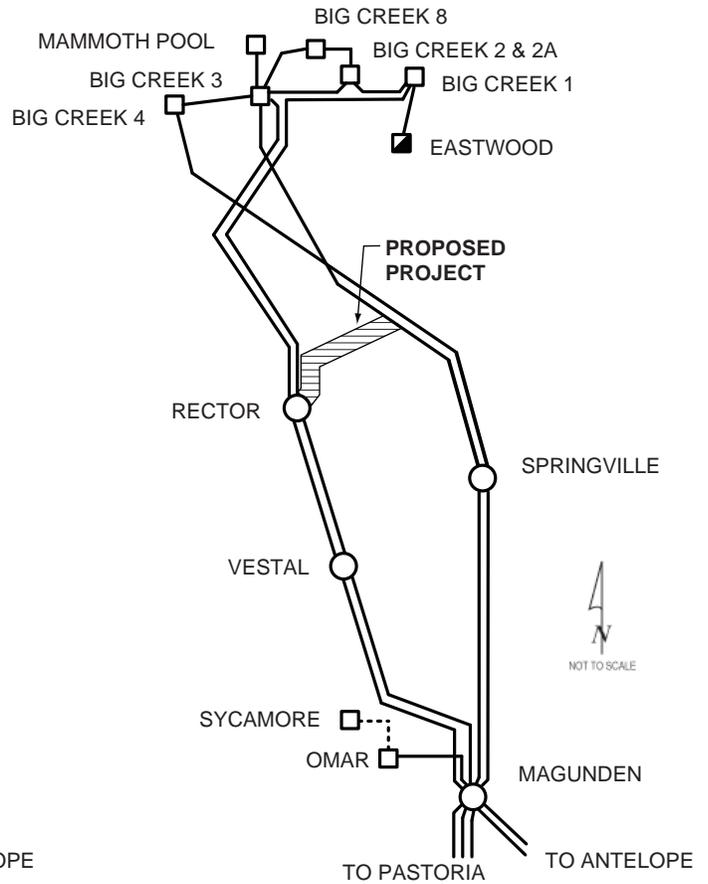
- Replacement of approximately 1.1 miles of two parallel sets of existing single circuit 220 kV transmission line segments with 1.1 miles of double circuit transmission line constructed on the western side of SCE's existing ROW immediately north of Rector Substation. This would clear the eastern side of the existing SCE ROW in order to provide a location for the construction of the first 1.1 miles of the new transmission line described immediately below (Figures 2-3 and 2-3a).
- Construction of a new, approximately 18.5-mile long, double circuit 220 kV transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the 220 kV Rector Substation, creating the new Big Creek 3-Rector No. 2 220 kV transmission line circuit and the new Rector-Springville 220 kV transmission line circuit (Figures 2-3a – 2-3j). The first 1.1 miles of the new double circuit transmission line would be on the eastern side of SCE's existing ROW adjacent to the new double circuit 1.1 mile line segment described above.
- Installation of electrical equipment and substation supporting structures for the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at Rector Substation to accommodate the transmission lines; and
- Removal of wave traps and line tuners and installation of additional protective relays at Rector Substation, Springville Substation, Vestal Substation, and Big Creek 3 Substation.

Figure 2-3 shows the general location and alignment of the Proposed Project. The Proposed Project alignment would use approximately 1.1 miles of existing SCE's transmission line ROW (immediately north of the Rector Substation) and require the acquisition of approximately 17.4 miles of new 100-foot wide ROW. After the first 1.1 miles the line would turn east and parallel Highway 198 for 9.2 miles along the valley floor through mature agricultural orchards. The line would then continue north and east generally along property lines until it connects with the existing Big-Creek 3-Springville and Big-Creek 4-Springville transmission lines. This would create two new circuits, the Big-Creek 3-Rector No. 2 220 kV and the Rector-Springville 220kV.

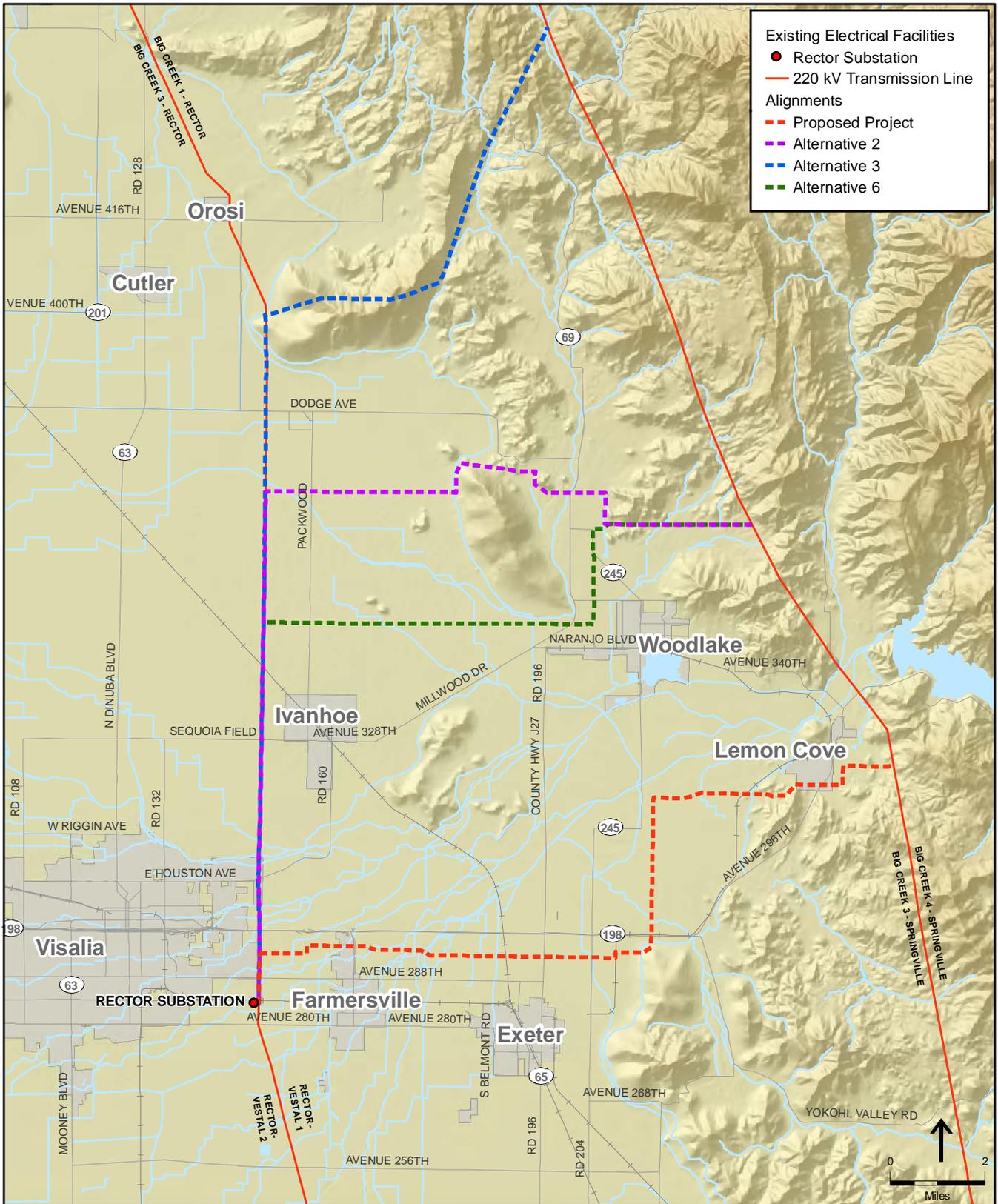
**EXISTING
TRANSMISSION SYSTEM**



**PROPOSED PROJECT
TRANSMISSION SYSTEM**



LEGEND	
—	220-kV Transmission Line
----	(non-SCE owned)
○	220-kV Substation
□	Generating Plant
■	Generating Plant (Pump Storage)



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 2-3
Proposed Project Overview

2.5 Project Components

A summary of the key components of the Proposed Project is provided Table 2-1, followed by a more detailed discussion by component.

**TABLE 2-1
SUMMARY OF PROJECT COMPONENTS**

Replace two sets of single circuit 220 kV transmission towers with new 220 kV double circuit structures

- From the Rector Substation to 1.1 miles north within the existing SCE ROW
- Remove approximately 26 single circuit lattice towers, conductor, and assemblies
- Install approximately six double circuit tubular poles, one double circuit lattice tower, and replace or modify two single circuit lattice towers
- Install two circuits of 1033.5 thousand circular mils (kcmil) non-specular aluminum conductor steel reinforced (ACSR), with one conductor per phase and three phases per circuit
- Install one optical ground wire for communication and shielding
- Insulator type: Polymer
- Structure heights: approximately 120 to 160 feet above ground
- Span lengths: Between approximately 850 feet and 1,050 feet

New double circuit 220 kV transmission line from Big Creek 3-Springville 220 kV transmission line into Rector Substation

- From the Rector Substation to a connection point on the Big Creek 3-Springville 220 kV transmission line
- Line length: 18.5 miles long (1.1 miles of existing ROW, 17.4 miles of new ROW to be acquired)
- Install approximately 96 double circuit tubular poles, six single-phase tubular poles at the connection point, and 11 double lattice steel towers (six tubular poles and one lattice tower within existing SCE ROW, and 90 tubular poles and 10 lattice towers within the new ROW to be acquired)
- Install two circuits of 1033.5 kcmil non-specular ACSR conductor, one conductor per phase and three phases per circuit
- Install one optical ground wire for communication and shielding
- Insulator type: Polymer
- Structure height: Approximately 120 to 160 feet above ground
- Span lengths: Between approximately 400 feet and 1,200 feet
- New access: Approximately eight miles of new access roads and spur roads

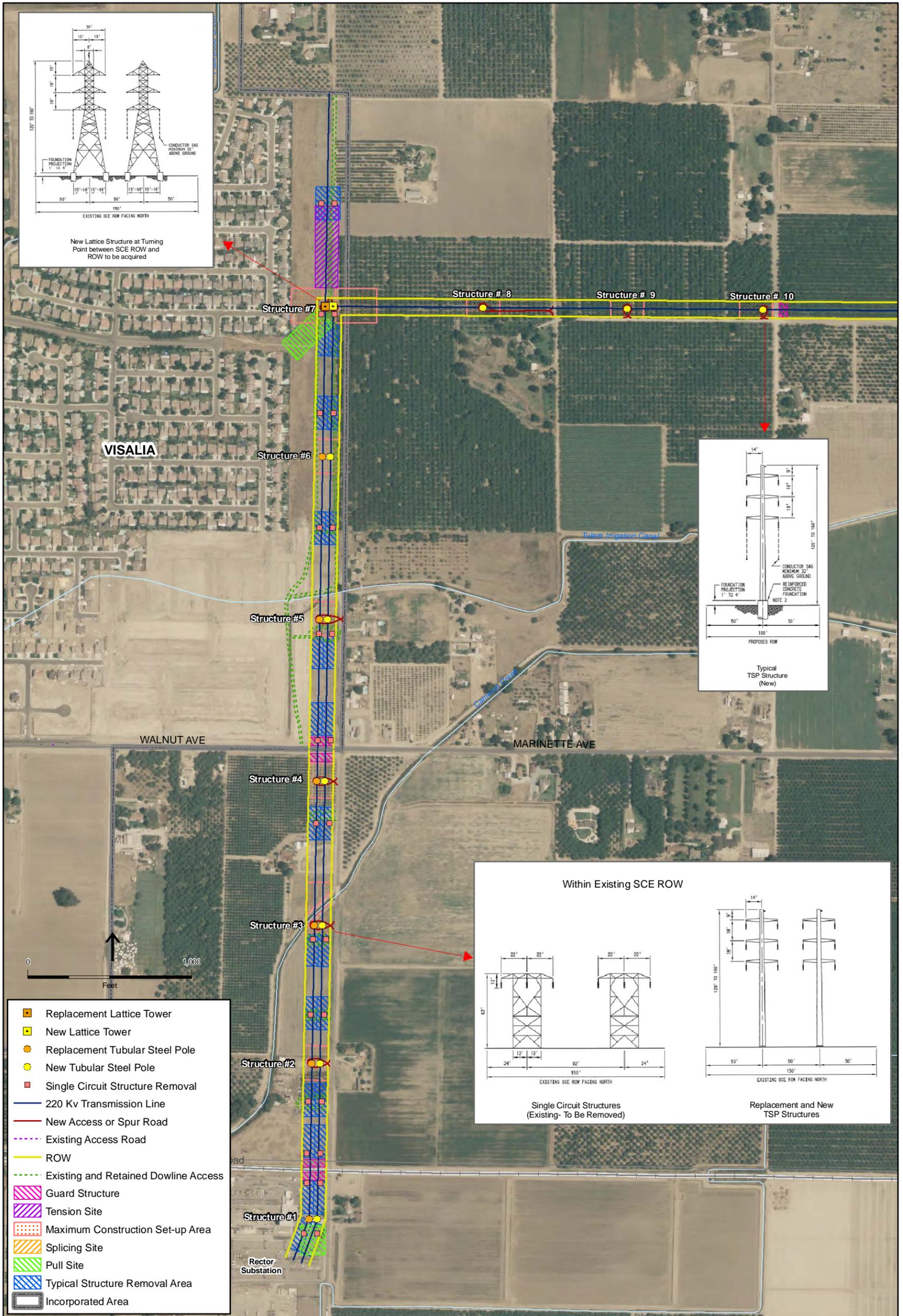
Rector Substation Modifications

- Relocate the terminations of two existing transmission lines to adjacent dead-end bays to accommodate connection of the new transmission lines to the existing 220 kV switchrack
- Equip two 220 kV line positions with circuit breakers, disconnects, and switchracks to accommodate connection of the two new transmission lines to the existing 220 kV switchrack
- Replace the two existing circuit breakers
- Construct a MEER to house protective relay equipment

Rector Substation, Big Creek 3 Substation, Vestal Substation, and Springville Substation Modifications

- Install upgraded protective relays and remove existing wave trap and line tuner
-

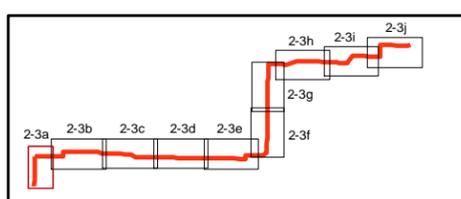
SOURCE: SCE, 2008b.

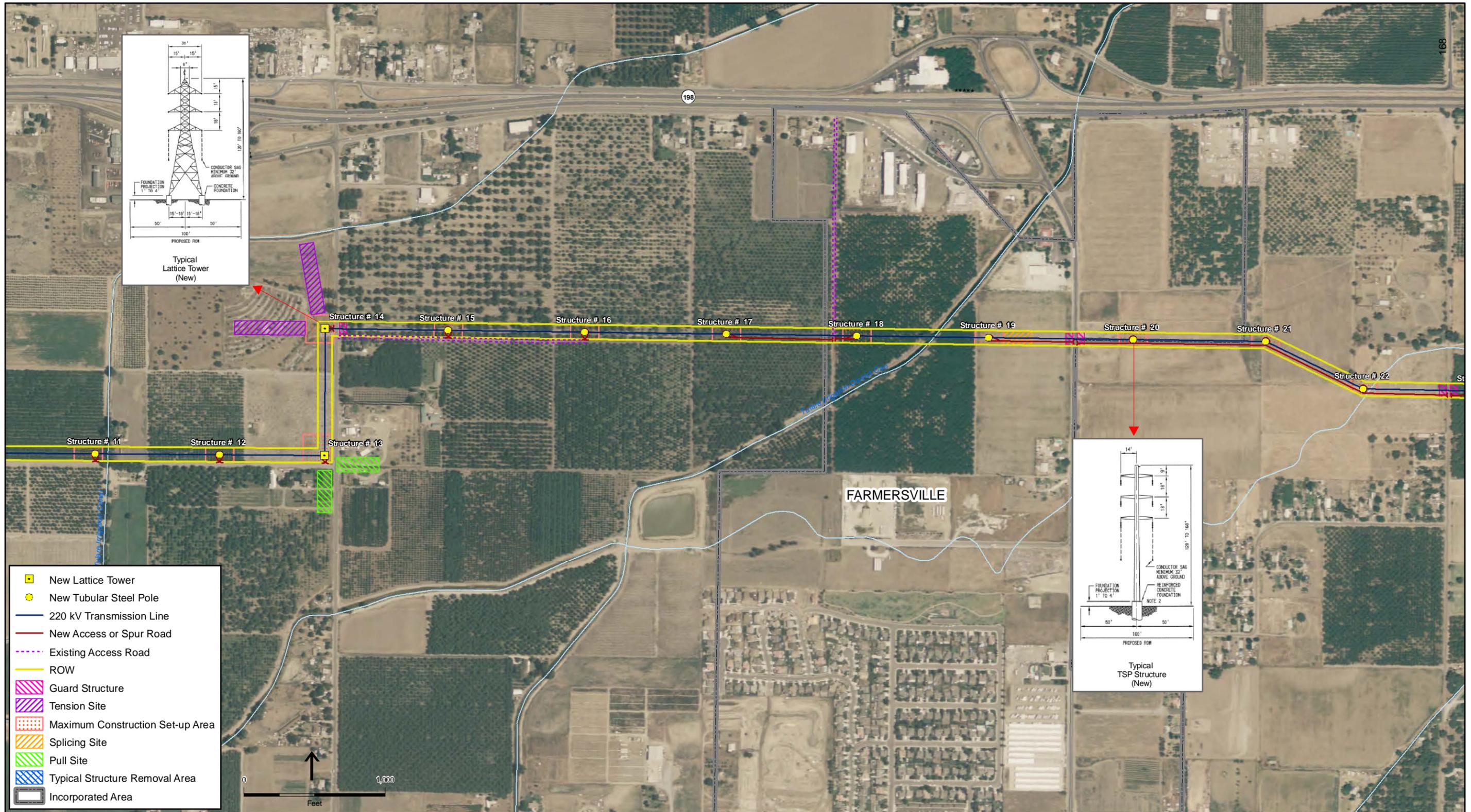


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3a
Proposed Project

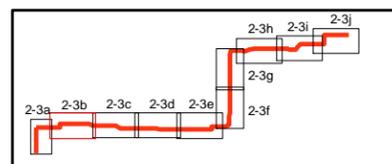


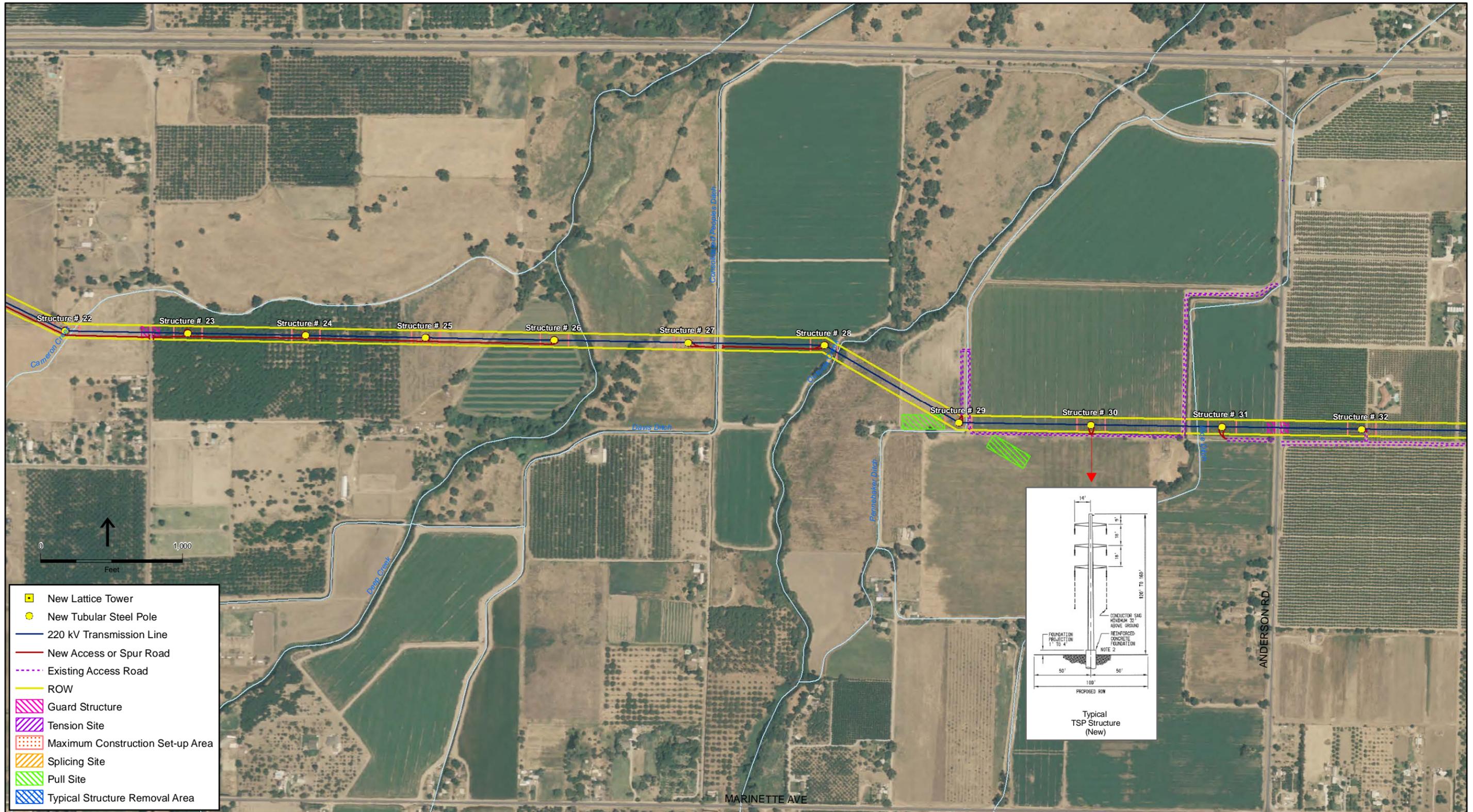


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3b
Proposed Project

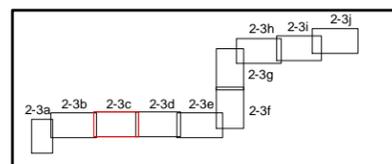


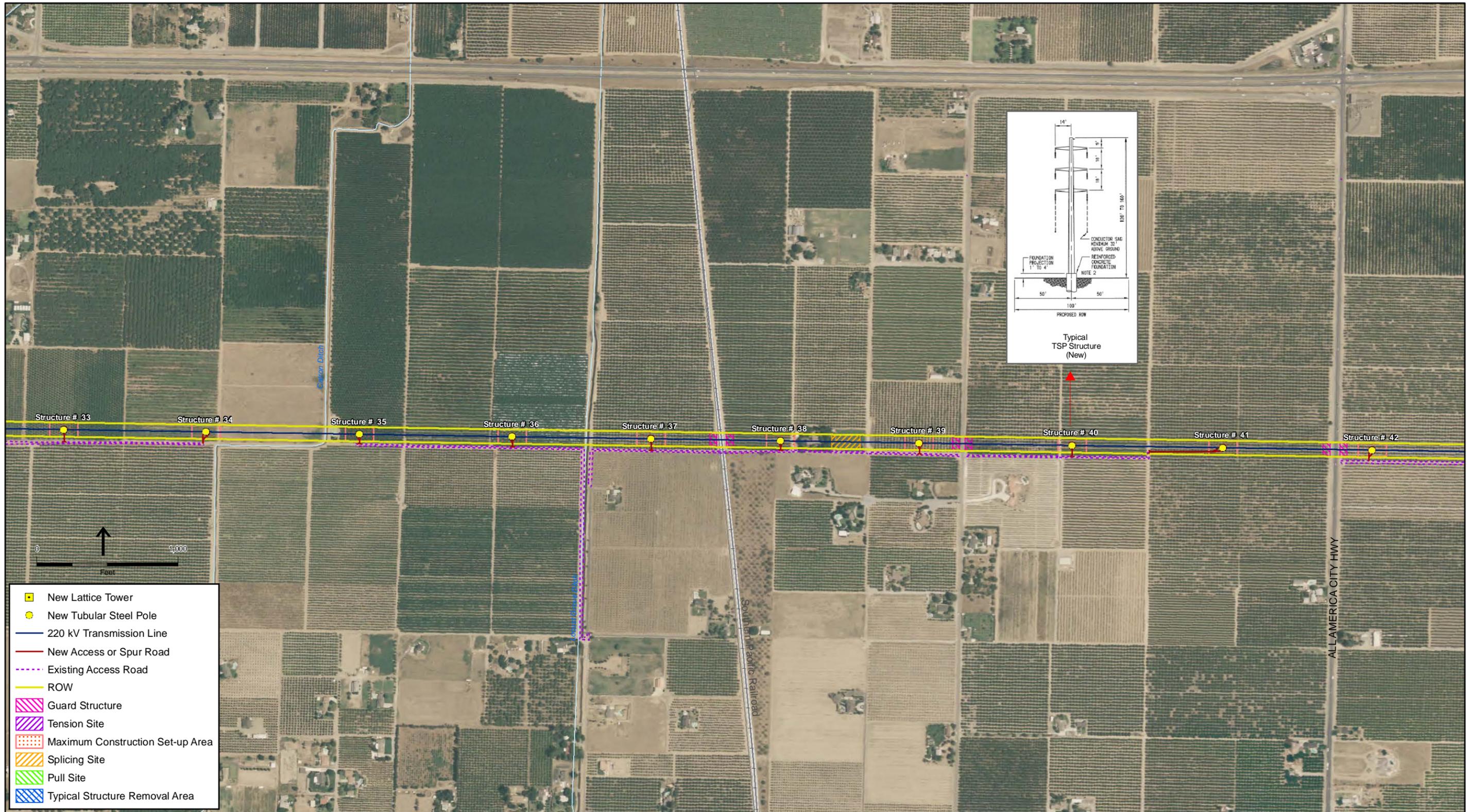


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3c
Proposed Project

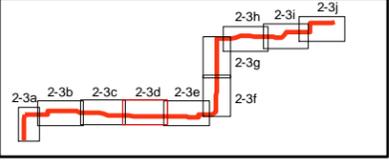


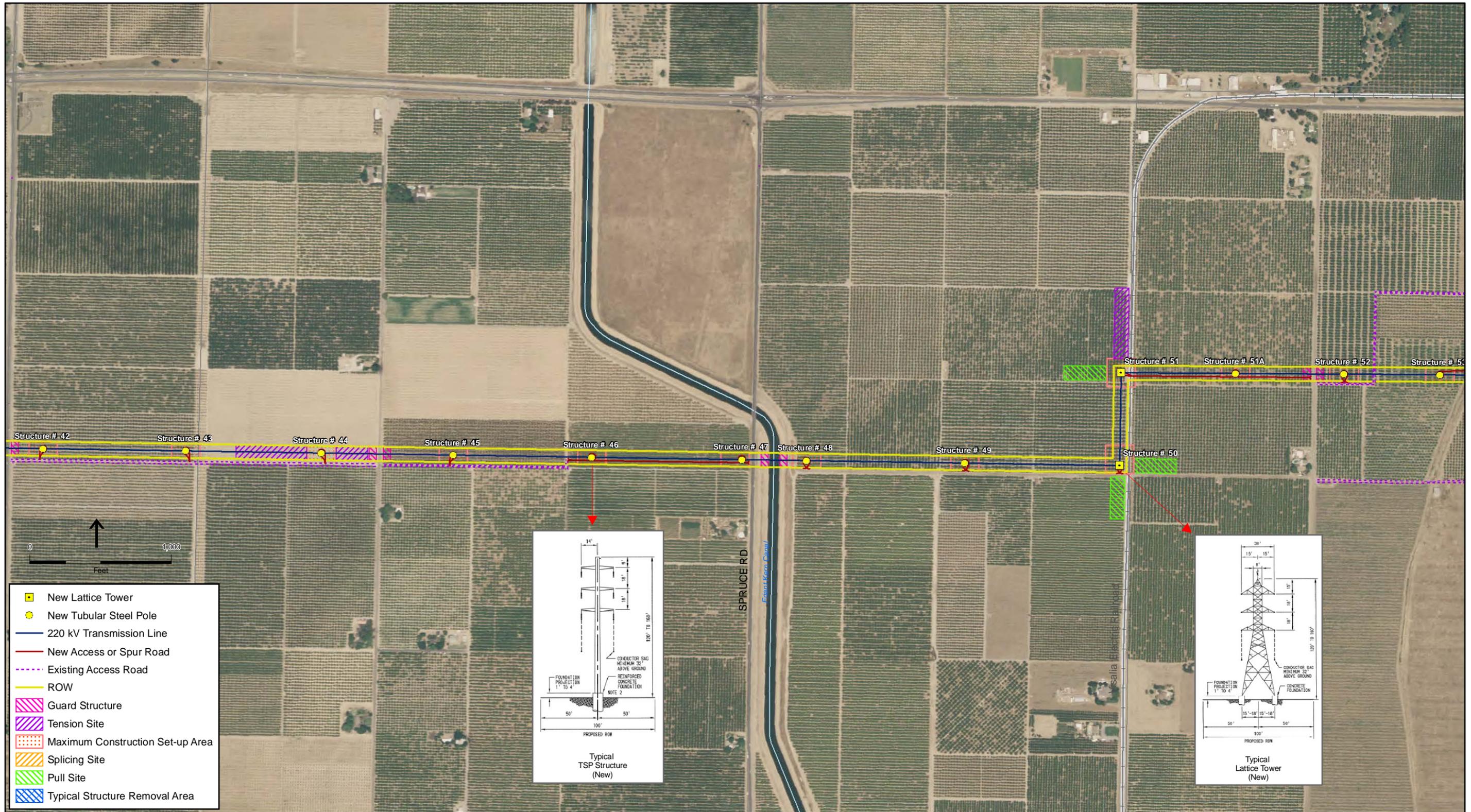


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3d
Proposed Project

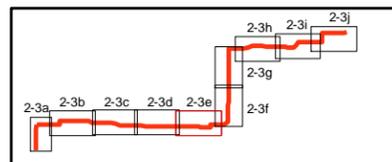


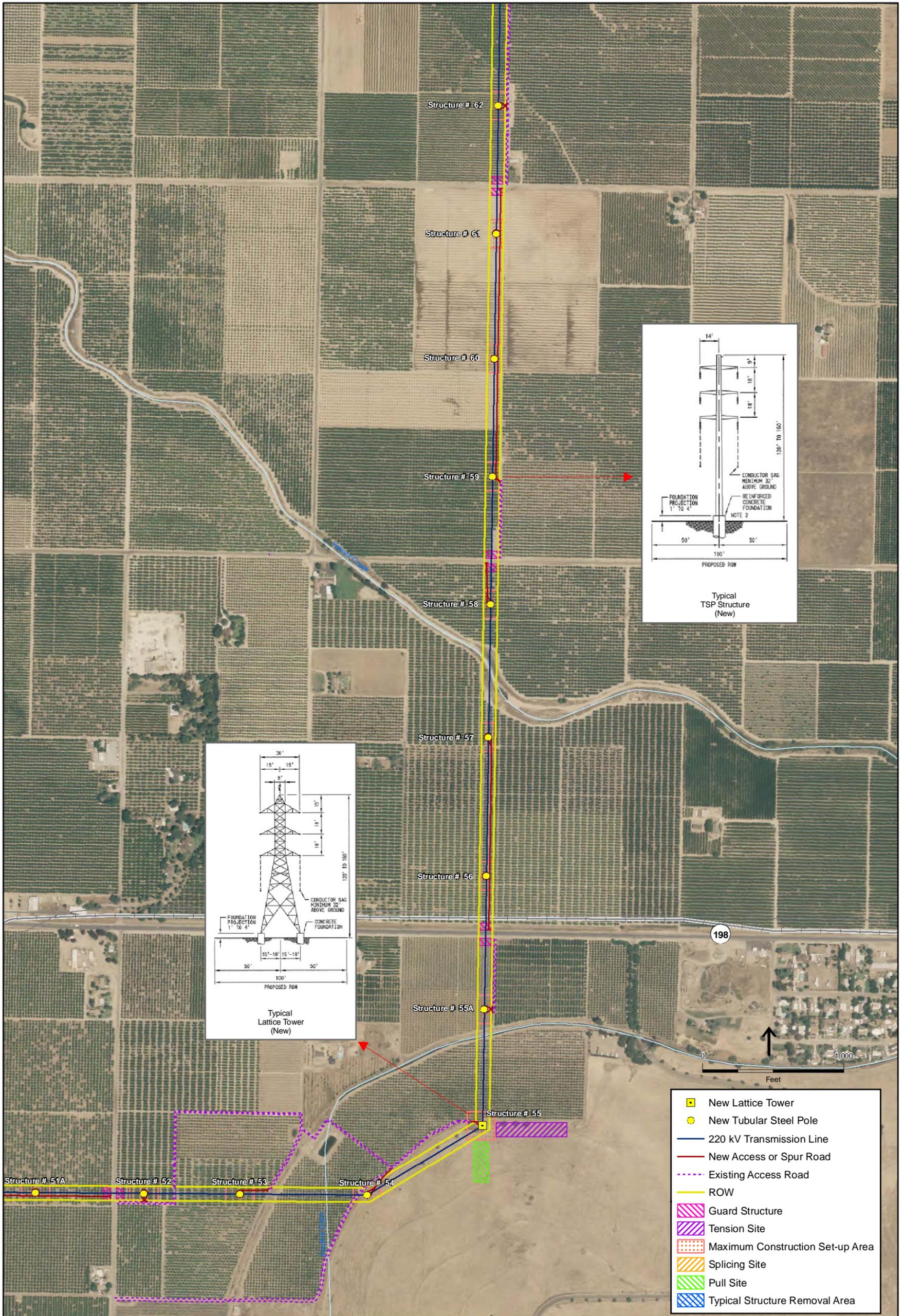


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3e
Proposed Project

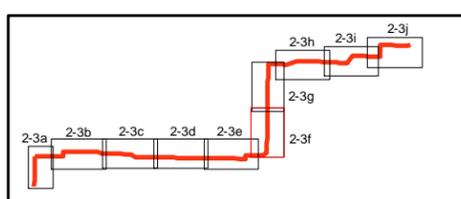


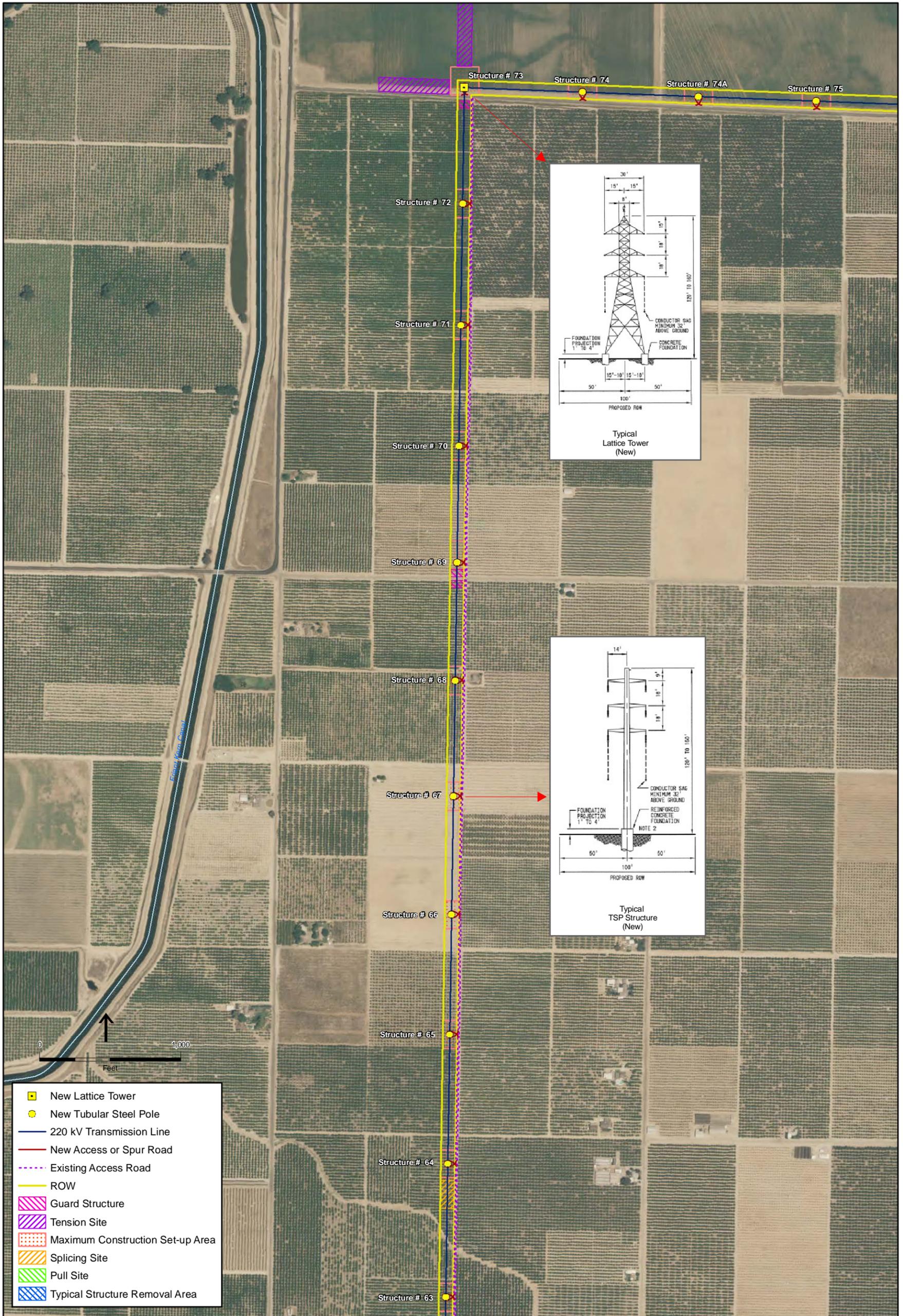


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3f
Proposed Project

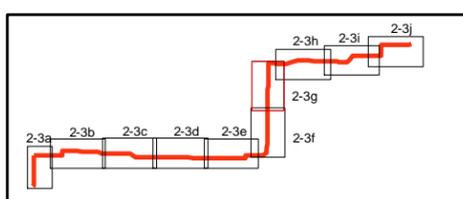


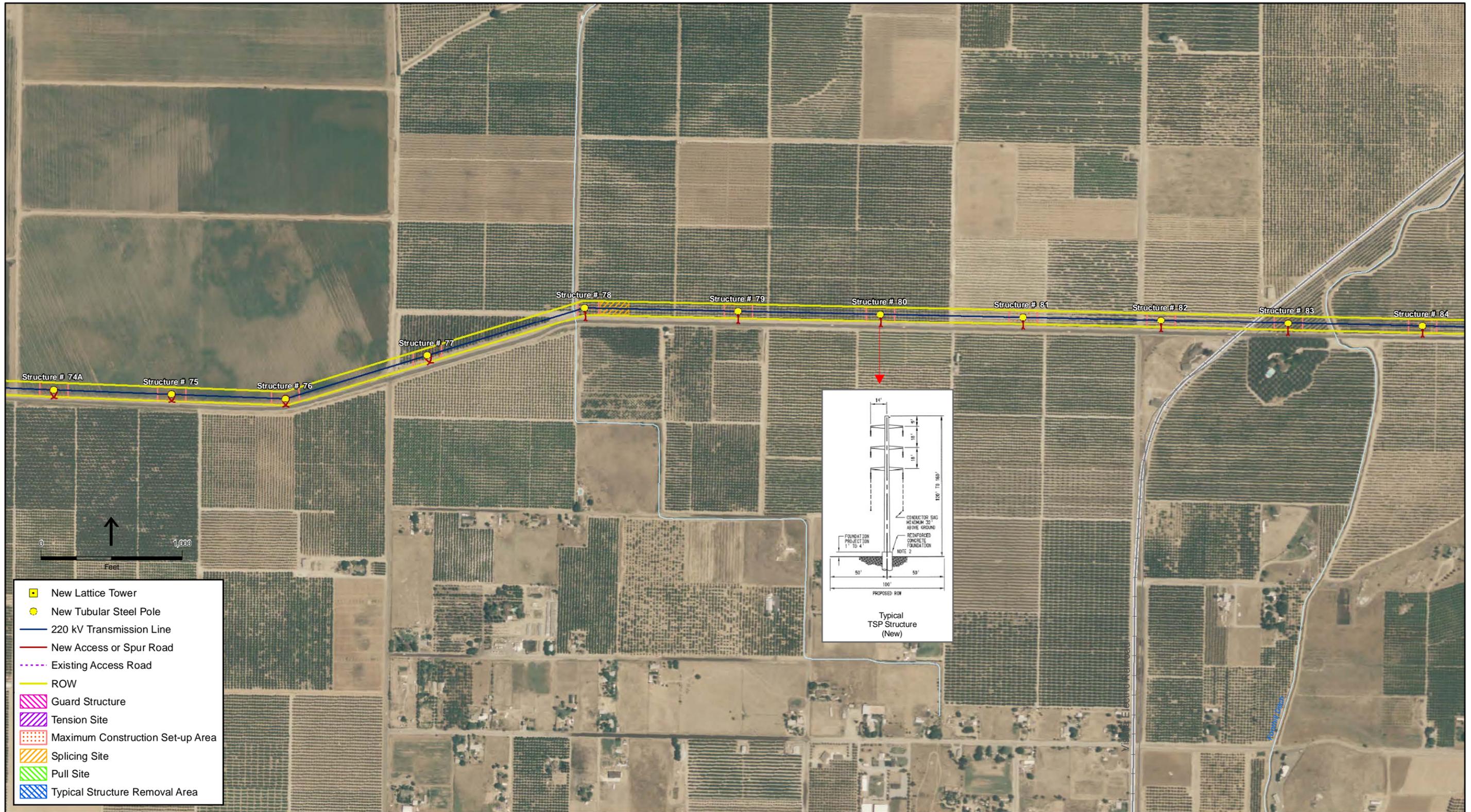


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3g
Proposed Project

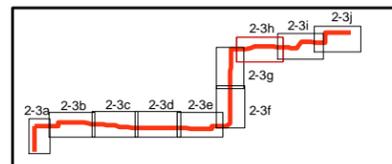


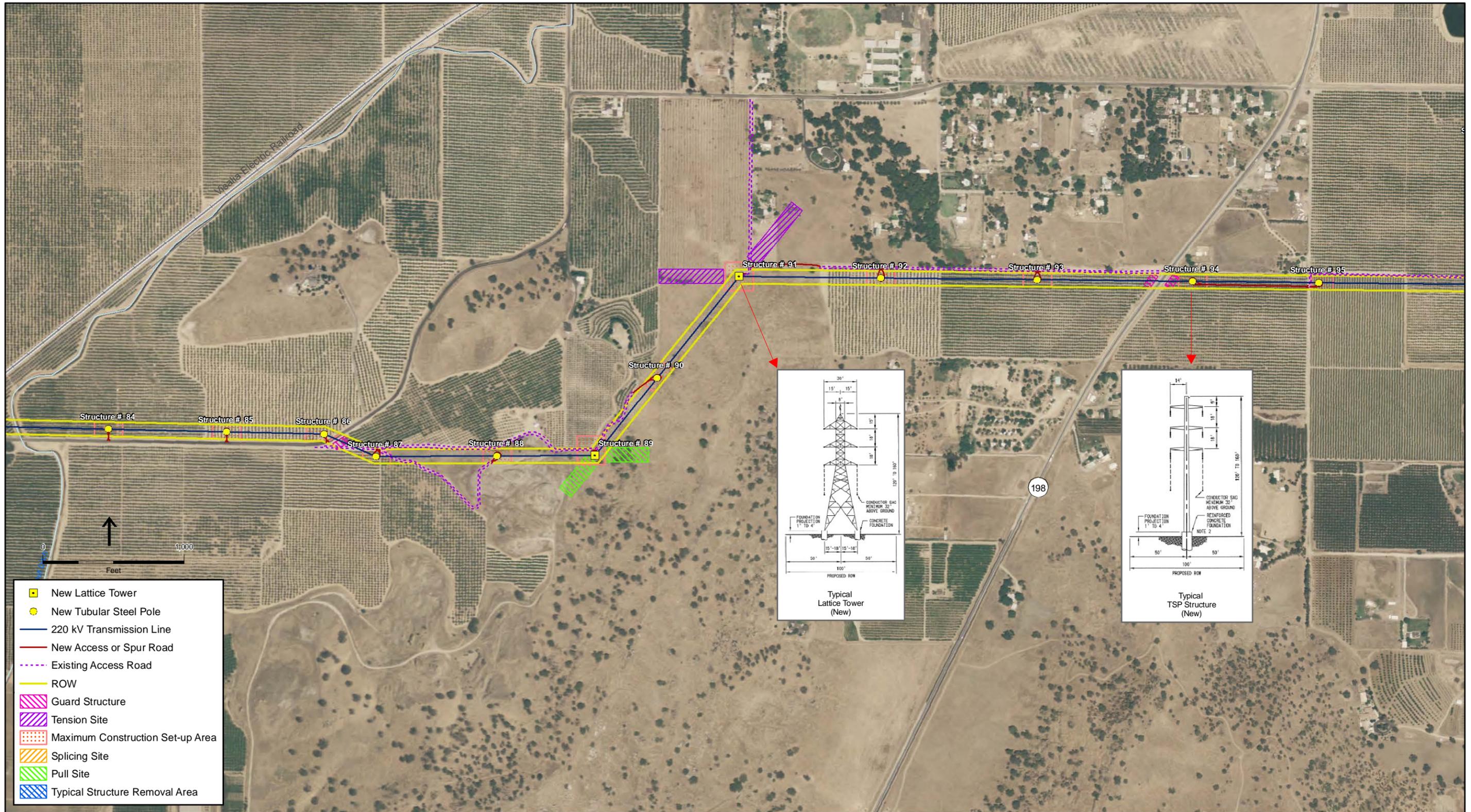


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3h
Proposed Project

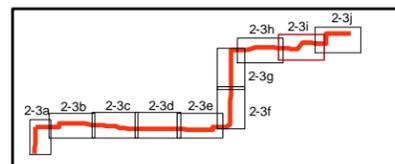


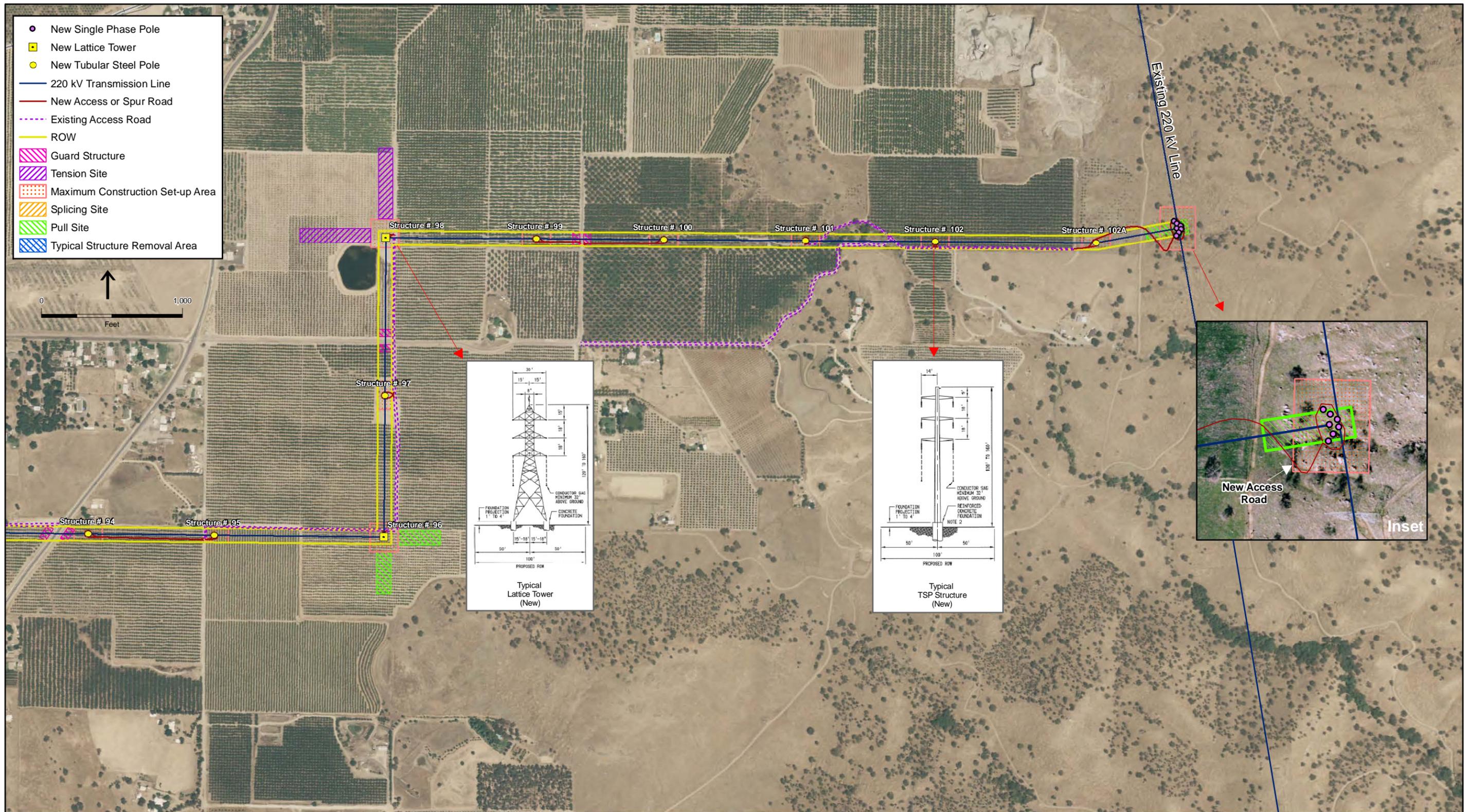


SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3i
Proposed Project

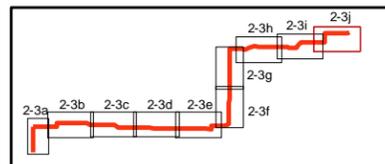




SOURCE: ESRI, 2008; SCE, 2008; TBM, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-3j
Proposed Project



2.5.1 Replacement of Single Circuit 220 kV Transmission Lines with a Double Circuit Transmission Line

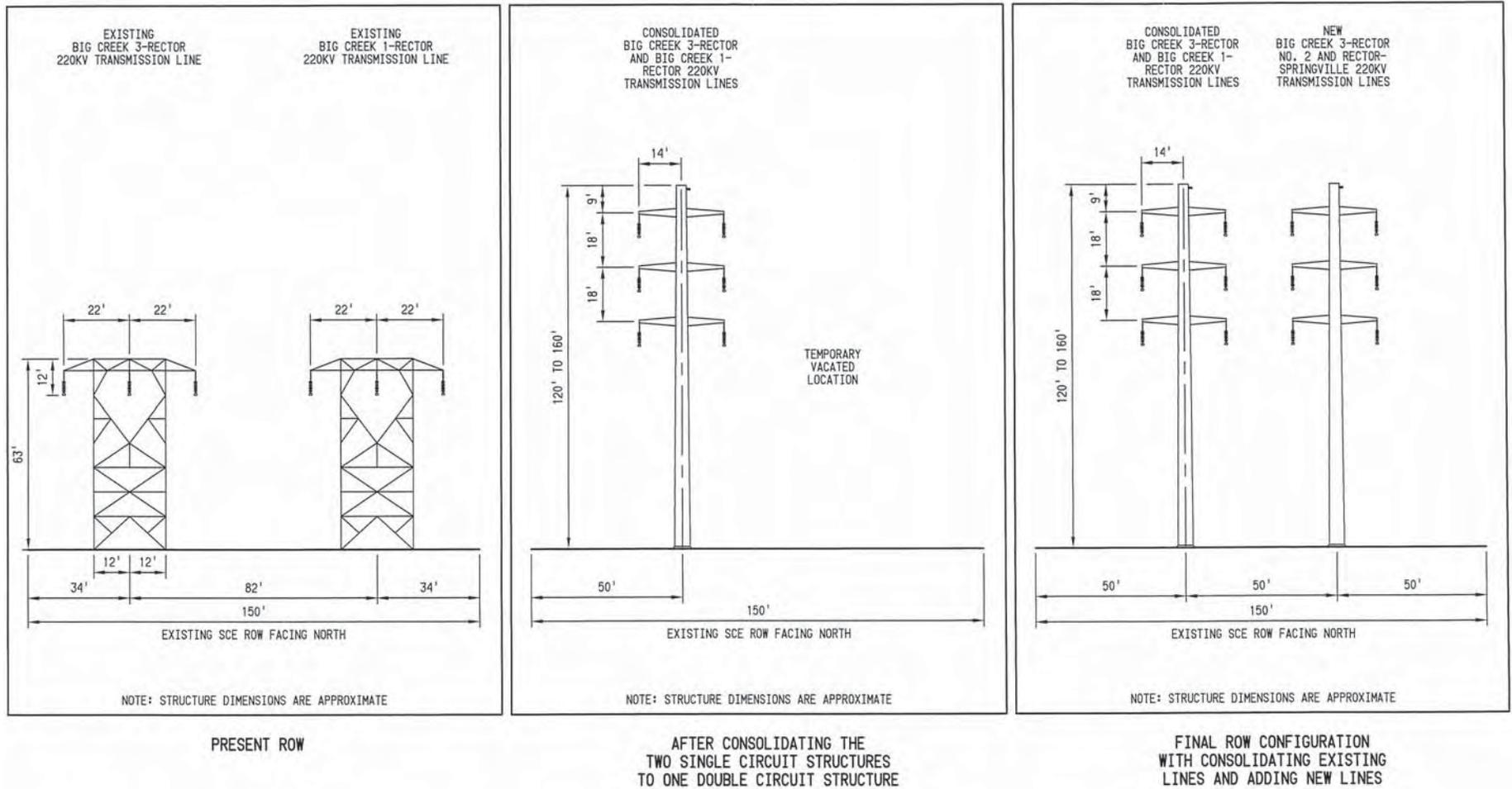
In order to provide a location within the existing SCE ROW for the first 1.1 miles of the Proposed Project, the two existing single circuit 220 kV transmission lines would be consolidated onto one double circuit 220 kV transmission line on the western side of the ROW. The first 1.1 miles of existing Big Creek 3-Rector transmission line and the Big Creek 1-Rector transmission line north of the Rector Substation is supported by 26 single circuit towers split on either side of the ROW. These towers would be removed and both of the transmission lines would be relocated onto six new double circuit tubular poles and one new lattice tower on the western side of the ROW. The lattice tower would be located at the turning point 1.1 miles north of the Rector Substation between the existing SCE ROW and the ROW to be acquired (Figure 2-4).

2.5.2 New Double Circuit 220 kV Transmission Line

The new double circuit 220 kV transmission line would connect the Rector Substation to the existing Big Creek 3-Springville 220 kV transmission line approximately 58 miles south of the Big Creek Powerhouse No. 3. The new transmission lines would be named the Big Creek 3-Rector No.2 220 kV transmission line and the Rector-Springville 220 kV transmission line.

The Proposed Project alignment would begin at the Rector Substation heading north for approximately 1.1 miles within the existing SCE ROW. At mile 1.1, the Proposed Project would turn east running parallel to Avenue 292 for approximately one mile until it reaches Road 156. At Road 156, the line would head north for approximately 0.1 miles and would then head east again for approximately 6.5 miles. At approximately mile 8.8, the line would head north at the former Visalia Electric Railroad ROW for approximately 0.1 miles and then turn east for approximately 0.7 miles to the base of Badger Hill. From here, the line would head north for approximately 3.2 miles and then turn east paralleling Cottage PO Drive/Avenue 320 for approximately 2.5 miles. The line would then head southeast for approximately 0.3 miles then turn northeast to parallel an existing SCE 66 kV subtransmission line. At mile 16 the line would turn east for one mile, then north for 0.4 miles, then east for 1.1 miles until it would reach the existing Big Creek 3-Springville 220 kV transmission line at a point 58 miles south of Big Creek 3 Powerhouse No. 3. The Proposed Project alignment is shown in Figures 2-3a through 2-3j.

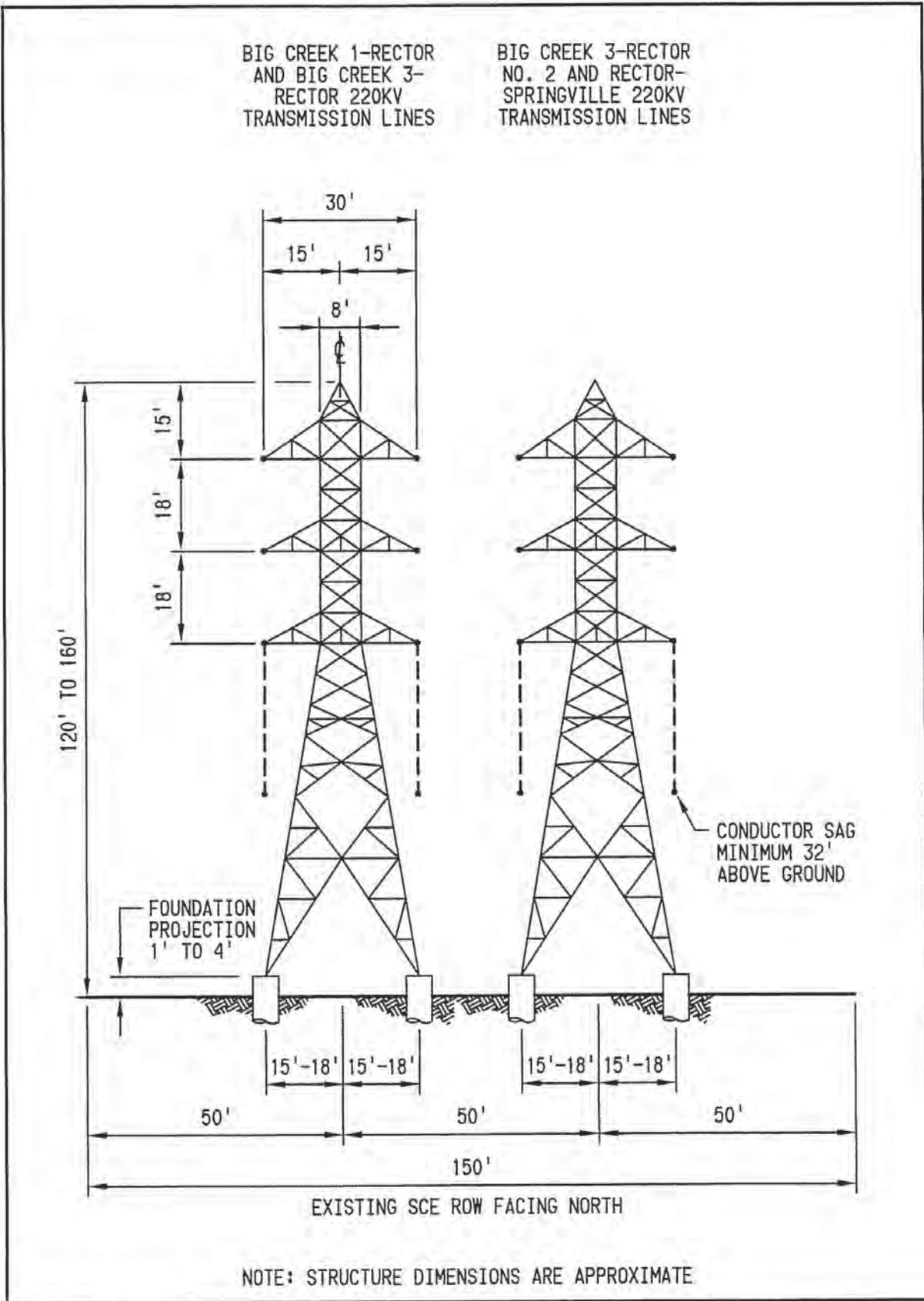
The Proposed Project design would allow for future upgrades to the system and increased overall service area capacity. The poles and towers to be used in the new double circuit 220 kV transmission line would support 1033.5 kcmil ACSR conductors, polymer insulators, and one optical ground wire for shielding and telecommunications. Upgrades would be possible with the addition of a second 1033.5 kcmil ACSR conductor (per phase), or other conductors to increase the system capacity and electrical transfer capability in the future.



SOURCE: SCE, 2008

San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 2-4
Replacement of Single Circuit 220kV Structures
with Double Circuit 220kV Structures



NOTE: STRUCTURE DIMENSIONS ARE APPROXIMATE

Figure 2-5
Transmission Structures to be Located
1.1 miles north of Rector Substation

2.5.3 Poles and Towers

The Proposed Project would replace the existing lattice towers for the first 1.1 miles north of the Rector Substation with new double circuit tubular poles and one lattice tower at the turning point. The Proposed Project would install double circuit poles and towers for the entire 18.5-mile new transmission line. In areas along the Proposed Project alignment where additional structuring strength would be required, such as areas requiring long conductor spans or turning points along the alignment, lattice towers would be installed.

On the 1.1 mile section of existing transmission line immediately north of the Rector Substation, the Proposed Project would replace the existing 26 double lattice single circuit towers with approximately six double circuit tubular poles and one steel lattice structure. The existing configuration of parallel rows of single circuit towers which would be replaced with a single row of double circuit tubular poles on the western portion of the ROW. This process would clear the eastern portion of the ROW for the construction of the proposed new transmission line described below.

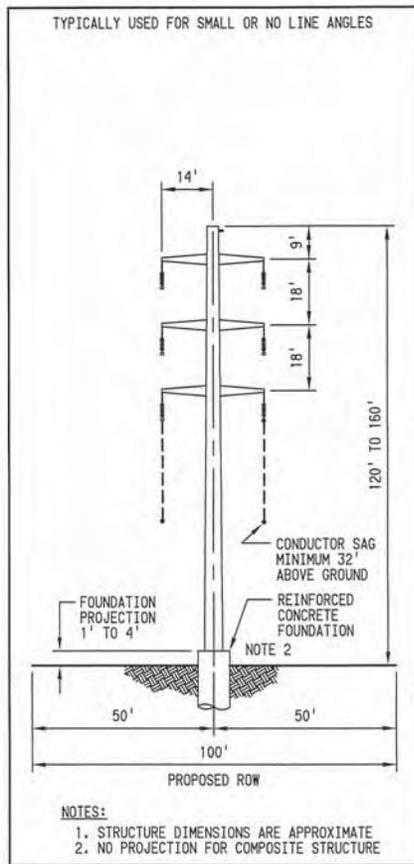
The proposed construction of a new 18.5 mile 220 kV transmission line would involve the installation of approximately 96 double circuit tubular poles and 12 double circuit lattice towers. Approximately six poles and one tower would be installed within the existing ROW in the 1.1 mile segment north of the Rector Substation. The remaining approximately 90 poles and 11 towers would be installed in newly acquired ROW (Figures 2.3a-2.3j).

The double circuit tubular poles would be constructed of either tubular steel or of a concrete/steel hybrid. The tubular steel poles consist of all steel structures with a dulled galvanized finish. Some sections of pole may be too large to galvanize; in these instances a grey protective paint or other finishing coating would be substituted. The concrete/steel hybrid poles have a tubular concrete base and lower portion and a dulled, galvanized steel upper remaining section of the pole. Pole heights would range from approximately 120 feet high to 160 feet above ground surface (ags) with span lengths between structures ranging from 840 to 1,200 feet (Figure 2-6).

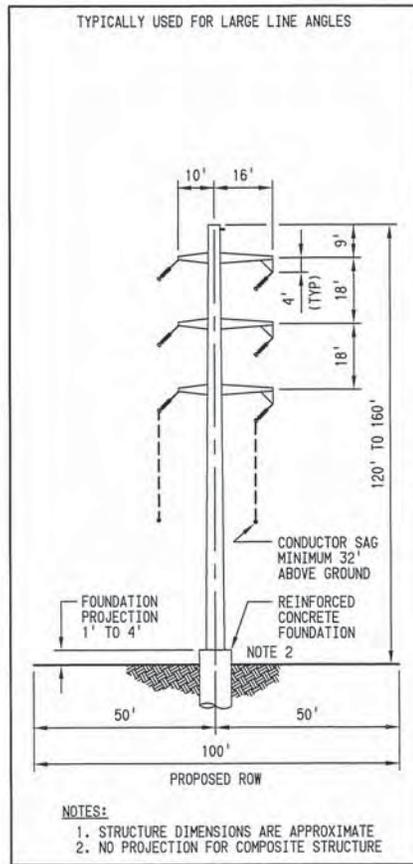
**TABLE 2-2
SUMMARY OF POLE INFORMATION**

Pole Type	Approximate Location	Typical Pole Height (ags)	Number of Poles and Towers to be installed/Removed
Single Circuit Lattice towers	First 1.1 miles of Transmission Line north of Rector Substation (existing)	63 feet	26 single phase lattice towers to be removed
Double Circuit Poles	Throughout entire 18.5 miles of new transmission line and replacing existing structures in 1.1 miles of existing transmission line	120 to 160 feet	102
Double Circuit Lattice Towers	At turning points and areas where large spans are required throughout entire 18.5 miles of new transmission line and at end of 1.1 mile replacement section.	120 to 160 feet	12

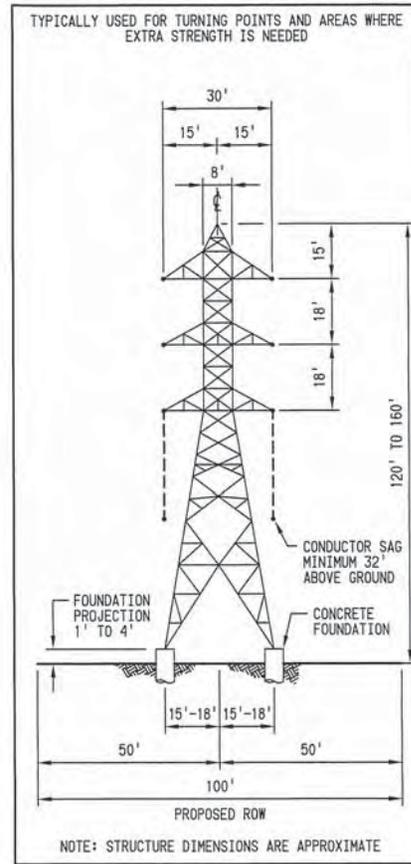
SOURCE: SCE, 2008b.



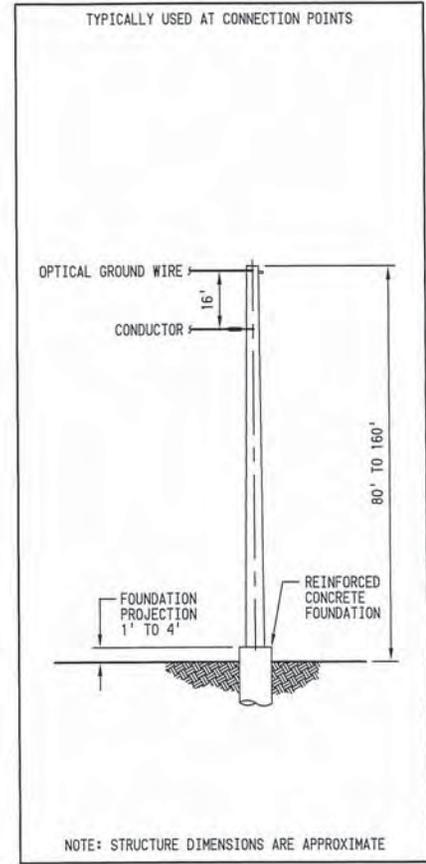
TYPICAL TUBULAR STEEL POLE AND COMPOSITE POLE



TYPICAL TUBULAR POLE



TYPICAL LATTICE TOWER



TYPICAL SINGLE PHASE POLE ONE POLE USED PER PHASE

2.5.4 Substation Modifications

2.5.4.1 Rector Substation Modifications

The Rector Substation is located in northwestern Tulare County, approximately one-quarter mile southeast of the City of Visalia. Modifications to the existing Rector Substation would include the relocation of the terminations of two sets of single 220 kV transmission lines, installation of two new circuit breakers, replacement of two existing circuit breakers, and the construction of a new MEER to house relay equipment. All the substation modifications would occur within the existing footprint of the substation yard. New underground conduit would be installed between the MEER and both the switchrack and the main office building. The MEER would be a prefabricated steel shed, approximately 12 feet tall, and 36 feet long by 20 feet wide. The MEER would be tan with dark brown trim and have a shielded light above the door that would be manually switched on and off.

2.5.4.2 Big Creek 3, Vestal and Springville Substation and Additional Rector Substation Modifications

The Proposed Project would involve modifications at the Rector, Big Creek 3, Vestal, and Springville Substations (Figure 2-1). All substation modifications would occur within the existing fence lines and would consist of installing new cable and conduit between the buses and the substation MEER, installing new protective relays within each MEER, and removing a wave trap and line tuner from each substation. These four substations are located at:

- Rector Substation – approximately 0.25 miles southeast of the City of Visalia in Tulare County;
- Big Creek 3 Substation – approximately 19 miles southwest of the town of Big Creek in Fresno County;
- Vestal Substation – approximately 3.5 miles northeast of the community of Richgrove in Tulare County; and
- Springville Substation – approximately 8.5 miles east of the community of Strathmore in Tulare County.

2.6 Right-of-Way Requirements

SCE has a 150-foot wide ROW associated with the existing transmission line north of the Rector Substation. The Proposed Project transmission line would occur within 1.1 miles of existing SCE ROW and 17.4 miles of acquired 100-foot wide ROW. It is estimated that 231 acres of permanent ROW would be required to construct, operate and maintain the Proposed Project, including the 20 acres of existing ROW. Approximately 211 acres of new ROW would be acquired for the transmission line, including condemnation of a 2,800 square foot residence located within the ROW to be acquired. In addition, the Proposed Project would require approximately eight miles of new 20-foot wide access roads. These roads would require the acquisition of approximately 2.1 acres of new ROW.

2.7 Construction

This section describes construction methods to be used to complete the various components of the Proposed Project including transmission line construction and replacement, and substation modifications.

2.7.1 Transmission Line Construction and Replacement

Transmission line construction and replacement would require:

- staging areas
- access roads
- removal of existing towers
- new structure installation
- site cleanup and waste disposal.

2.7.1.1 Staging Areas

Construction of the Proposed Project would require temporary staging and storage areas to store materials and equipment during the construction process. Materials and equipment typically staged at these areas would include, but would not be limited to:

- Construction materials (tower steel bundles, tubular poles, palletized bolts, rebar, conductor, optical ground wire, insulators and hardware);
- Construction vehicles and facilities (heavy equipment, light trucks, construction trailers with electrical and communications connections, and portable sanitation facilities);
- Crew vehicles; and
- Material that would be removed from the existing transmission lines (conductor, steel, concrete, and other debris). These materials would be temporarily stored in staging areas as the material awaits salvage, recycling, or disposal.

SCE would use existing commercial facilities near the Proposed Project as material staging areas. It is anticipated that at least two material areas, up to five acres in size, would be required during construction. If the existing surface is not compatible with storage and equipment requirements, the staging areas would be surfaced with crushed rock. Staging areas would also be fenced and screened from view from adjacent residences or businesses. Land disturbed at the staging areas, if any, would be restored to preconstruction conditions or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Proposed Project.

2.7.1.2 Access Roads and Spur Roads

Access roads are through-roads that run between tower sites along a ROW and serve as the main transportation route along a transmission line ROW. Spur roads are roads that lead from line access roads and terminate at one or more transmission structure sites. Existing public roads and

private ranching roads would be used to the maximum extent practical. Where existing roads do not provide the necessary access, new access and spur roads would be developed.

The Proposed Project would require access road/spur road construction on both the existing ROW and the ROW to be acquired. Where construction would take place on the existing ROW, it is assumed that most of the necessary access would be provided by existing roads; however, modifications to the locations of access and spur roads would be required based on new structure locations. It is also assumed that modification work would be necessary in some locations for the existing roads to support construction activities.

All access road and spur road alignments would first be cleared and grubbed of vegetation. Roads would be blade-graded to remove potholes, ruts, and other surface irregularities, and recompact to provide a smooth and dense riding surface capable of supporting heavy construction equipment. In some locations where rock is present, blasting may be necessary. Prior to blasting a person licensed by the Federal Bureau of Alcohol, Tobacco, and Firearms would assess the area, make any required measurements, and engineer the blast for a safe and effective explosion. Pre-blast notifications would be made to the local fire department, residents, utilities, and others potentially affected by blasting operations. Once the notifications are complete, the holes would be drilled and the explosive charges loaded into the holes. If the blast is near sensitive receptors (i.e., houses, powerlines, roads), special protective measures would be installed to control flying rock. In addition, the area would be secured to avoid inadvertent entry by the public or other unauthorized personnel. After the area is secured, the appropriate pre-blast warning signals would be given and the blast detonated. After detonation, a post-blast safety inspection would be conducted to ensure that the blast completely discharged and personnel may enter safely to excavate the blasted material.

Each graded road would have a minimum drivable width of 16 feet plus two feet of berm on each side, producing 20-foot wide access roads and spur roads (see Table 2-3). There are no drainage structures or wet crossings expected to be installed in access roads for the Proposed Project; however, this would be verified prior to construction. If required, SCE would install drainage structures which may include water bars, overside drains, culverts, and other engineered structures.

**TABLE 2-3
SUMMARY OF ACCESS ROAD REQUIREMENTS**

Type of Road	Description	Width	Miles	Area
New Permanent	Unimproved – Dirt	20 feet total (16 feet wide with a 2 foot berm on either side)	8.0	19.4 acres
New Temporary	N/A	N/A	0.0	0.0

SOURCE: SCE, 2008b.

It is anticipated that most of the access roads and spur roads constructed for the Proposed Project would be left in place following construction, and maintained to facilitate future access for operations and maintenance purposes. Gates would be installed where required at fenced property lines to restrict unauthorized vehicular access. Existing access roads and preliminary locations of new access roads and spur roads for the Proposed Project are shown in Figures 2-3a through 2-3j.

2.7.1.3 Removal of Existing Structures

Existing structures would be removed from the first 1.1 miles of existing ROW north of the Rector Substation to prepare the area for the consolidation of existing lines and construction of the new line as proposed. Transmission line equipment to be removed includes 26 existing 220 kV lattice steel towers and associated hardware (i.e., insulators, vibration dampeners, suspension clamps, ground wire clamps, shackles, links, nuts, bolts, washers, cotter pins, insulator weights, and bond wires), as well as the transmission line primary conductors, ground wire and footings.

To remove the existing conductors, wire-stringing locations would be sited along the existing transmission line corridor to place pull and tensioning equipment (Figure 2-3a). After the wire pulling equipment is in place, the old conductor wire would be wound onto “breakaway” reels as it is removed. The removal of existing conductors would involve the use of guard structures to prevent the conductor from falling below a conventional stringing height. The use of guard structures is detailed in Section 2.7.1.4.

A 3/8-inch pulling cable would replace the old conductor as it is pulled out, thereby allowing complete control of the conductor during its removal. The 3/8-inch line would then be removed under controlled conditions to minimize ground disturbance, and all wire-pulling equipment would be removed. The conductor would be transported to a material staging yard where it would be prepared for recycling.

For each tower to be removed, an approximately 75-foot by 150-foot area (0.17 acre) would be cleared of vegetation and graded if the ground is not level. The crane would be positioned approximately 60 feet from the tower location to dismantle the tower. After the tower is dismantled, the existing tower footing would be removed to a depth of at least three feet. Holes would be filled and compacted, and then the area would be smoothed to match surrounding grade.

2.7.1.4 New Structure Installation

Site Preparation

A construction setup area would be cleared at each structure site. These construction setup areas would be at least 100-foot by 100-foot (0.23 acre) in size, but may be up to 200-foot by 200-foot (0.92 acre) in size. These construction setup areas would be cleared and grubbed of vegetation, and graded such that water would drain in the direction of the natural drainage. The grading would be done in a manner to ensure that no ponding would occur and no erosive water flow would cause damage to the new tower footings. The graded pad would be compacted to support heavy vehicles. At some sites, soil may be imported as necessary to raise the elevation of the

structure pads. Where site conditions do not provide a stable ground surface to safely work utilizing existing compacted soil, crushed rock surfacing may be added. Material removed during the grading process would be spread over existing access roads and workpads as appropriate, or disposed of off-site in accordance with all applicable laws.

Foundations

The design for the foundations for each structure would vary, based on the type of structure used at each specific location. There are two basic pole structure options: a concrete/steel hybrid (concrete base) and a tubular steel pole that would be bolted on to a cast in place reinforced concrete foundation. Depending upon soil conditions, grounding may be required at the base of some structures. The grounding mechanism would typically be comprised of a metallic wire buried beneath the surface one to three feet deep, and extend between the foundation and a point approximately 50 to 100 feet from the foundation (Table 2-4).

**TABLE 2-4
POLE AND TOWER INSTALLATION METRICS**

	Single Circuit Lattice Tower	Double Circuit Lattice Tower	Double Circuit Tubular Pole	Single Phase Tap Pole
Poles/Towers Removed	26	0	0	0
Poles/Towers Installed	0	12	102	6
Height	63 feet (ags)	120 to 160 feet (ags)	120 to 160 feet (ags)	80 to 160 feet (ags)
Construction set up area at each structure	NA	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)
Number of foundations required	NA	4	1	1
Excavation diameter	NA	3 to 6 feet	6 to 10 feet	6 to 10 feet
Excavation depth	NA	15 to 30 feet	20 to 60 feet	20 to 60 feet

SOURCE: SCE, 2008b.

The concrete/steel hybrid tubular poles would be direct buried. In order to install these poles, a hole six to nine feet in diameter and 20 to 60 feet deep would be excavated for each pole (up to 145 cubic yards (CY) of soil). The excavated material would either be used by the property owner or disposed of off-site. Final engineering design would determine appropriate backfill material to fill the annular space around the buried pole section. Typically, a granular backfill or slurry backfill material is used, and would be delivered to the site (up to 115 CY).

The tubular steel poles and lattice towers would be installed with reinforced concrete foundations. The concrete foundation would be completed using standard “poured in place” augered excavation techniques. Foundations that extend into groundwater would require that a mud slurry be placed in the hole after drilling to prevent the sidewalls from sloughing. The concrete for the foundation is then pumped to the bottom of the hole, displacing the mud slurry. The mud slurry

brought to the surface would typically be collected in a pit adjacent to the foundation and then pumped out of the pit to be reused or discarded.

At the time of construction, foundation elevations would be established, rebar cages set, anchor bolts placed, and concrete placed. Survey positioning would be verified. Concrete strength would be verified by controlled testing of sampled concrete. Once this strength has been achieved, crews would be permitted to commence erection of steel. Depending on the footing type and depth, typically between 15 to 100 CY of concrete would be delivered to each structure site to install footings.

For tubular steel poles, a boring approximately 20 to 60 feet deep and six to 10 feet in diameter would be made (up to 175 CY of soil would be excavated), and a reinforcing steel cage with anchor bolts would be installed in the boring. The steel cages would be placed in the boring and concrete would be poured into each hole. Depending on the site-specific geotechnical and hydrological conditions, the concrete foundation would be installed to extend above ground approximately one to four feet.

Each lattice tower requires four foundations. An auger would be used to excavate holes that would typically be three to six feet in diameter and 15 to 30 feet deep (up to 130 CY of soil would be excavated). Concrete reinforcing and stub angles would be set into the hole and concrete poured to set the foundation. Similar to the tubular steel pole footings, the site-specific geotechnical and hydrological conditions would determine how high aboveground the footings would extend. Most lattice steel tower foundations would extend above ground one to four feet.

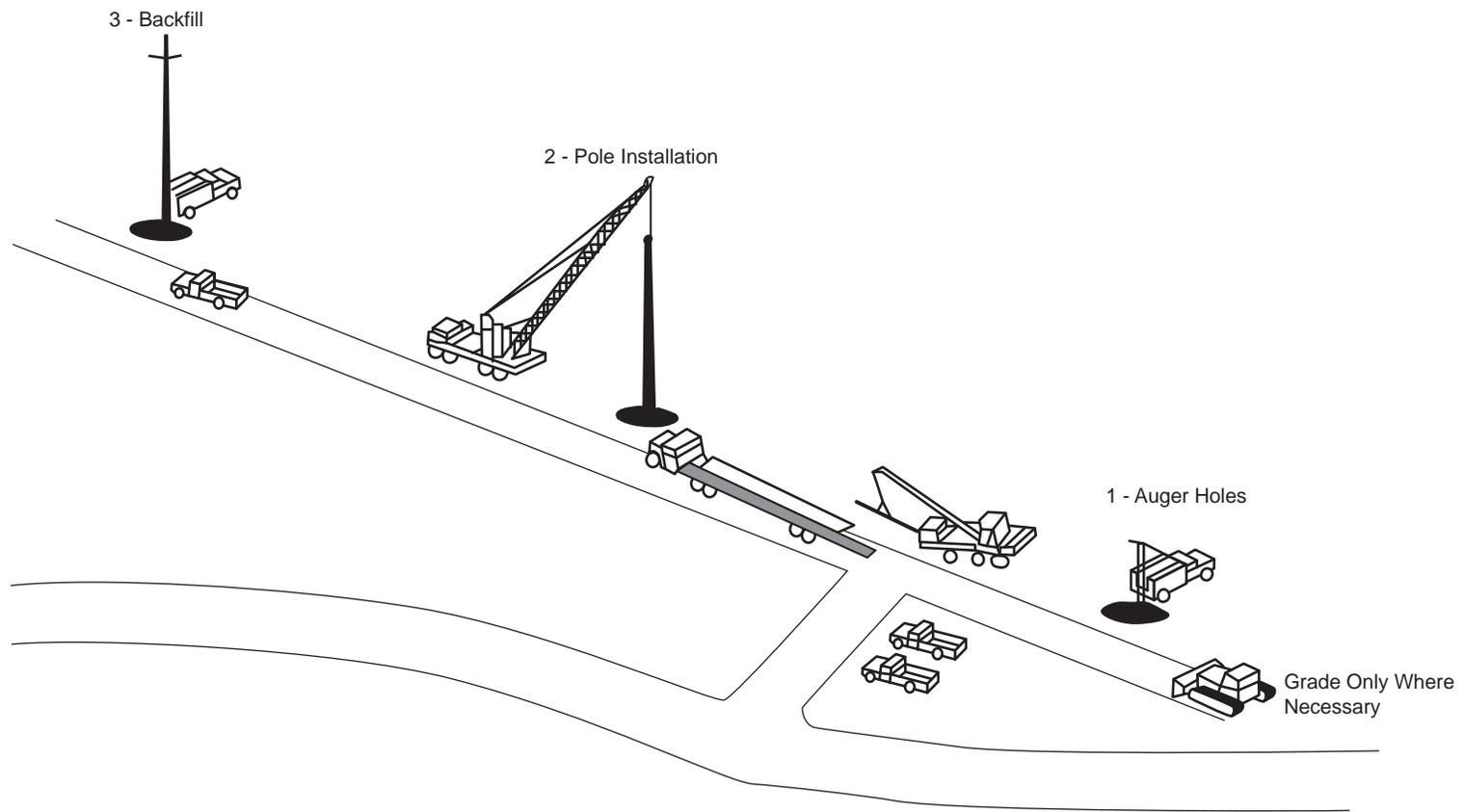
Structure Assembly

Tubular poles would be delivered in two or more sections for each structure site via flatbed truck and assembled on-site using a crane. Each pole shaft section would be joined to the section below using lap splice joints, which are pulled together with hydraulic jacking devices. After assembly, a minimum 80-ton crane would be used to lift and set the pole sections into place (Figure 2-7).

Towers would be assembled at laydown areas at each site, and then erected and bolted to the foundations. Tower assembly would begin with the hauling and stacking of bundles of steel at each tower location per engineering drawing requirements. This would require the use of two tractors with 40-foot floats on an onsite loader at each tower site. Steel would be delivered and stacked and then crews could proceed with assembly of leg extensions, body panels, boxed sections and the bridges. The steel work would be completed by a combined erection and torquing crew with a lattice boom crane. At this time, the construction crew could opt to install insulators and wire rollers (travelers) that would later facilitate conductor installation.

Guard Structures

Guard structures may be installed at transportation, flood control, and utility crossings (Figures 2.3a-2.3j). Guard structures are temporary facilities that are installed to prevent the movement of a conductor should it momentarily drop below a conventional stringing height. Temporary netting could also be installed to protect some types of under-built infrastructure, such



as freeways, railroads, and electrical distribution lines. Typical guard structures are comprised of 60 to 80 foot tall standard wood poles depending on the horizontal extent of all conductors being installed across the feature. The number of guard poles installed on either side of a crossing would be between two and four. The guard structures are removed after the conductor is clipped into place. In some cases, the use of wood poles could be substituted with the use of specifically equipped boom-type trucks with heavy outriggers staged to prevent the conductor from dropping.

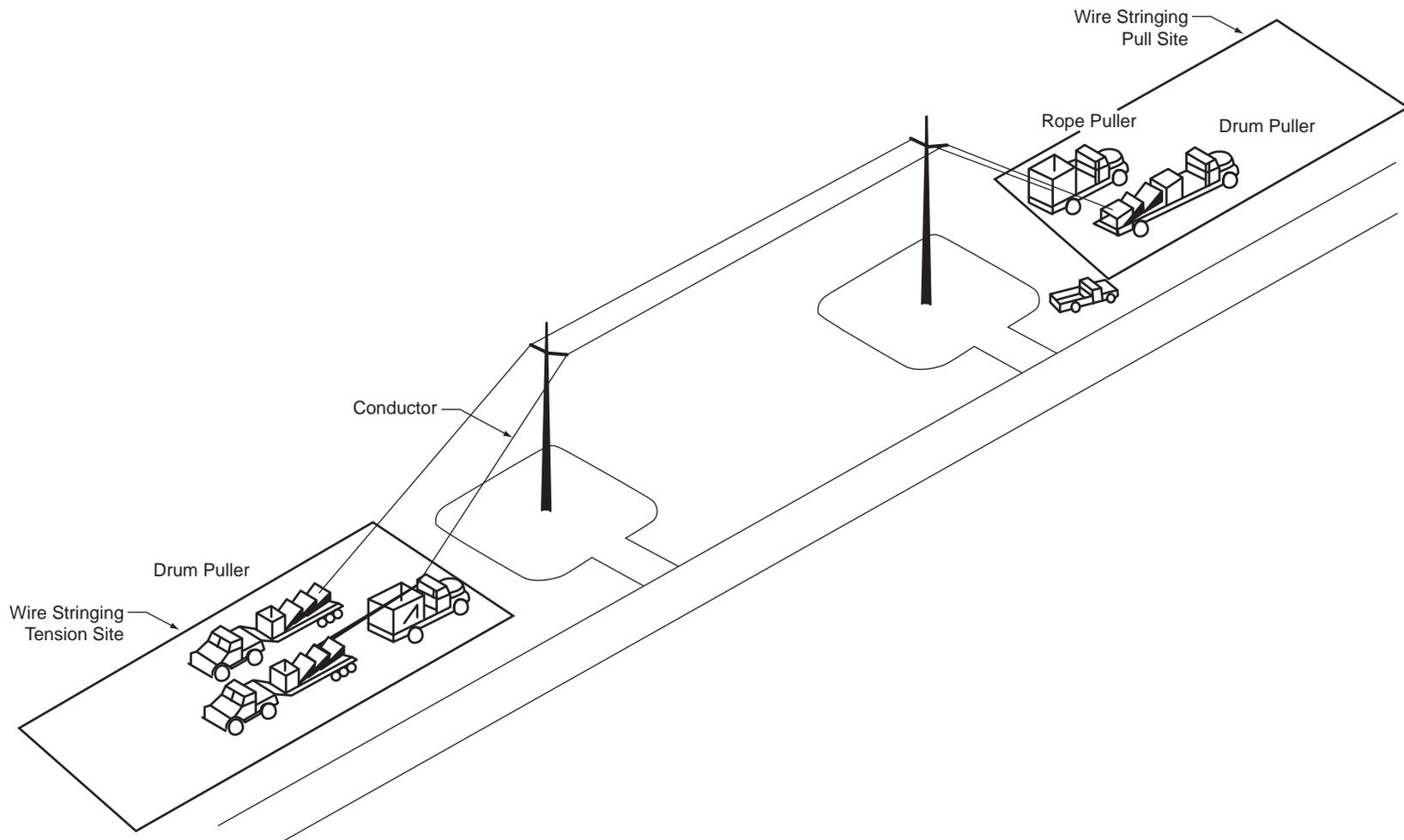
Approximately 40 guard structure sites would be required for transmission line conductor installation, depending on safety requirements. Each guard structure would be approximately 50 feet by 100 feet (0.11 acre) in size. The total land temporarily disturbed by the use of guard structures would be approximately 4.6 acres.

Conductor and Shield Wire Stringing

Conductor and shield wire stringing is an activity that includes the installation of primary conductor and shield wire, optical ground wire, vibration dampeners, weights, and suspension and dead-end hardware assemblies. These wire-stringing activities would be conducted in accordance with SCE specifications, which are similar to process methods detailed in IEEE Standard 524-1992, Guide to the Installation of Overhead Transmission Line Conductors. The wire pulling, tensioning, and splicing set-up locations require level areas to allow for maneuvering of the equipment. When possible, these locations would be located on existing level areas and existing roads to minimize the need for grading and cleanup. Circuit outages, pulling times, and safety protocols needed for wire stringing would be determined prior to work to ensure that safe and quick installation of wire is accomplished.

Conductor stringing operations begin with the installation of travelers, or rollers, on the bottom of each of the insulators using helicopters or aerial manlifts (bucket trucks). The rollers allow the conductor to be pulled through each structure until the entire line is ready to be pulled to the final tension position. Following installation of the rollers, a sock line (a small cable used to pull the conductor) would be pulled onto the rollers from structure to structure using helicopters or aerial manlifts traveling along the ROW. Once the sock line is in place, it would be attached to the conductor and used to pull or string, the conductor into place on the rollers using conventional tractor-trailer pulling equipment at pull and tension sites along the line. The conductor would be pulled through each structure under a controlled tension to keep it elevated and away from obstacles, thereby preventing third-party damage to the line and protecting the public. Conductor and shield wire installation may include the use of guard structures, as described previously (Figure 2-8).

The helicopter operation areas would be limited to helicopter staging areas such as Woodlake Airport or Rector Substation and possibly other positions near construction areas that have previously been used for helicopter activities and are considered safe locations for landing. Final siting of staging areas for the Proposed Project would be conducted with the input of a helicopter contractor, affected private landowners and land management agencies. During helicopter operations, public access to defined areas would be restricted. Flight paths would be primarily along the ROW and to and from staging areas. Helicopter use would be limited to stringing



NOT TO SCALE

activities and is estimated to be around six hours per day during stringing, with only two hours of flight time. Conductor stringing is estimated to take 26 days and would occur after construction of transmission line structures has been completed.

After the conductor is strung through the rollers located on each tower, the temporary pulling splices would then be removed and permanent splices would be installed. If the permanent splice could not be made at one of the pulling or tensioning sites being used, a temporary splicing location would be used and may include construction of a temporary road.

Typically, wire pulls occur every 15,000 feet on flat terrain or less in rugged terrain. Wire splices typically occur every 7,500 feet on flat terrain or less on rugged terrain. For stringing equipment that cannot be positioned at either side of a dead-end transmission tower, field snubs (i.e., anchoring and dead-end hardware) would be temporarily installed to sag conductor wire to the correct tension. Preliminary stringing sites are shown in Figures 2-3a through 2-3j.

Approximately 32 conductor stringing sites would be required for the Proposed Project transmission line conductor installation, depending on the final design and actual conductor reel lengths. These sites require reasonably level areas for maneuvering equipment.

The dimensions of the area needed for the stringing setups associated with conductor and optical ground wire installation are variable and depend upon terrain. The approximate size needed for tensioning equipment set-up sites is an area 200 feet by 500 feet (2.3 acres), the approximate size needed for pulling equipment set-up sites is an area 200 feet by 200 feet (0.92 acre), the approximate size needed for splicing equipment set-up sites is an area 150 feet by 100 feet (0.35 acre). Of the 30 acres expected for wire stringing sites, 20 acres would be outside the Proposed Project ROW. Preliminary pull sites, tension sites and splicing sites are shown in Figures 2-3a through 2-3j.

After the conductor is pulled into place, the sags between the structures would be adjusted to a pre-calculated level. The conductor would be installed with a minimum ground clearance of 32 feet. The conductor would then be clipped into the end of each insulator, rollers removed, and vibration dampeners and other accessories installed. For stringing operations, it would generally take approximately one-half day to pull three phases of conductor for approximately 9,000 feet of transmission line.

Once the conductor is in place, optical ground wire would be installed on the new double circuit transmission lines for communication and shielding. The optical ground wire would be installed in the same manner as the conductor. Fiber optic splice enclosures would be installed aboveground on the transmission line structures. The optical ground wire would be routed down the structure to the splice box (approximately three foot by three foot by one foot metal enclosure) where the optical fibers would be spliced. Spare optical ground wire is typically coiled within the enclosure. Splicing of the fibers would occur on the ground adjacent to the structure and the enclosure with the completed splices brought back up into the structure for final installation.

2.7.1.5 Land Disturbance

A summary of land that would be temporarily and permanently disturbed during construction of the Proposed Project is provided in Table 2-5. An estimated 120 acres would be disturbed during construction. Of this, 78 acres would be temporarily disturbed and restored following construction, and 42 acres would be permanently disturbed.

**TABLE 2-5
LAND DISTURBANCE ESTIMATES**

Proposed Project Feature	Quantity	Area Disturbed During Construction (acres)	Area to be restored (acres)	Area permanently disturbed (acres)
New Structure Sites	120	66.3	34	32.3
Existing Tower Sites	26	4	4	0
Wire Stringing Sites (including guard structures)	72	30	30	0
Access Roads and Spur Roads ^a	8 miles	9.7	0	9.7
Material Staging Yards	2	10	10	0
Total Estimated		120	78	42

^a Total disturbed area for access roads (from Table 2-3) is 19.4 acres; however, half of this disturbance (9.7 acres) is included in the Structure Site disturbance above.

SOURCE: SCE, 2008b.

Land temporarily disturbed during construction would be returned to as close to pre-construction conditions as possible following completion of construction activities. The temporary land area requirements expected for the Proposed Project include temporary work areas around each structure site (66.3 acres), temporary work areas for installing conductor (30 acres), temporary guard structures at crossings (4.6 acres) and the use of temporary storage and staging yards (estimated 10 acres).

Permanent land disturbance associated with the Proposed Project include the construction of new access and spur roads (9.7 acres), and the removal of orchard vegetation along the ROW (approximately 21 acres) for electrical system maintenance, safety and reliability purposes. During the construction phase of the Proposed Project approximately 4,900 to 6,400 trees would need to be removed to provide a safe and appropriate working space for equipment, vehicles, and materials. Of these approximately 2,000 to 3,500 could be replaced but approximately 2,900 trees would need to remain permanently removed. The tree types present in the construction areas are approximately 83 percent citrus, eight percent walnut, seven percent plum, and less than one percent each of oak, olive, pine, pomegranate, and other types.

2.7.1.6 Site Cleanup and Waste Disposal

During construction, water trucks would be used to minimize the quantity of airborne dust created by construction activities. Any damage to existing roads as a result of construction would be repaired once construction is complete.

SCE would restore all areas that were temporarily disturbed by construction of the Proposed Project (including material staging yards, pull and tension sites, and splicing sites) to as near preconstruction conditions as possible following the completion of construction. Restoration would include grading to original contours and reseeded where appropriate. In addition, all construction materials would be removed from the area and recycled or properly disposed of off-site. SCE would conduct a final inspection to ensure that cleanup activities were successfully completed.

Hazardous Materials

Construction and operation of the Proposed Project would require the limited use of hazardous materials, such as fuels, lubricants, and cleaning solvents. For all hazardous materials in use at the construction site, Material Safety Data Sheets would be made available to all site workers for cases of emergency.

Stormwater Pollution and Prevention

A Stormwater Pollution and Prevention Plan would be prepared for the Proposed Project to provide detail of locations that hazardous materials may be stored during construction, and the protective measures, notifications, and cleanup requirements for any accidental spills or other releases of hazardous materials that could occur.

Waste Management

Construction of the Proposed Project would result in the generation of various waste materials that could be recycled and salvaged. These items would be gathered by construction crews and separated into roll-off boxes. Salvageable items (i.e., conductor, steel, and hardware) would be transported to the material staging yards, sorted, and baled, and then sold through available markets. Items that may be recycled include the steel from towers, the conductor wire, and hardware. The wood poles used for guard structures and possible telecommunications support would be returned to the material staging yard, and depending on the condition of each pole, may be reused, disposed of in a Class I hazardous waste landfill, or in the lined portion of a Regional Water Quality Control Board (RWQCB) certified municipal landfill.

Construction of the Proposed Project would also generate waste materials that cannot be reused or recycled (i.e., wood, soil, vegetation, and sanitation waste); local waste management facilities would be used for the disposal of these types of construction waste. The disposal of any hazardous waste would be conducted at an appropriate facility.

2.7.2 Substation Modifications and Construction

Construction activities at Rector Substation would include both electrical work and civil work. Cranes and other truck-mounted equipment would be used to install the new electrical equipment, conductor spans, jumpers, connectors, and support structures. Foundations for the MEER and breakers would be excavated with a backhoe or auger in a process similar to that described for overhead structure installation.

The installation of new cable and conduit and the removal of wave trap and line tuners at Rector, Springville, Vestal, and Big Creek 3 Substations would require cranes and other truck mounted equipment. The installation of relay protection would consist of a crew driving to the site via existing paved roads. All substation modifications would occur within the existing developed property of each substation. Construction activities at the Vestal and Springville Substations would result in approximately 2,205 square feet and 1,935 square feet of ground disturbance, respectively. No ground disturbing activities would occur at the Big Creek 3 Substation.

2.7.3 Construction Workforce and Equipment

It is estimated that 50 craft laborers per day would be required to construct the Proposed Project at its peak. It is expected that at least 30 to 40 of the craft personnel would be from the contractor's pool of experienced personnel, with the remaining construction personnel coming from local sources. The estimated number of personnel and equipment required for construction of the Proposed Project is summarized in Table 2-6.

Construction would be performed by either SCE construction crews or contractors, depending on the availability of SCE construction personnel at the time of construction. If SCE transmission construction crews are used they would be based at Santa Clarita and/or San Joaquin Valley facilities, and if SCE telecommunications crews are used, they would be based at Alhambra and/or Fullerton facilities. Contractor construction personnel would be from within the San Joaquin Valley or adjacent areas and would be managed by SCE construction management personnel. Anticipated construction personnel are summarized in Table 2-7.

Construction efforts would occur in accordance with accepted construction industry standards. Construction activities generally would be scheduled during daylight hours (7:00 am to 5:00 pm), Monday through Friday. If different hours or days are necessary, SCE would obtain variances from local noise ordinances, as necessary, from the jurisdiction within which the work would take place. If work would occur at night, artificial illumination of the work area would be required. SCE would use lighting to protect the safety of the construction workers, but orient the lights to minimize their effect on any nearby receptors.

2.7.4 Construction Schedule

Table 2-8 summarizes the length of time anticipated to construct each phase of the Proposed Project. Construction of the transmission line would take between nine and 12 months. Crews are typically expected to work five 10-hour days (7:00 am to 5:00 pm). Depending on local permit

**TABLE 2-6
CONSTRUCTION EQUIPMENT REQUIREMENTS**

Work Activity Primary Equipment Description	Estimated Horse- power	Probable Fuel Type	Primary Equipment Quantity	Estimated Schedule (days)	Duration of Use (Hrs/Day)
Survey				20	
½ Ton Pick-up Truck, 4X4	200	Gas	2	20	8
Material Staging Yard					
1 Ton Crew Cab 4X4	300	Diesel	1		2
30 Ton Crane Truck	300	Diesel	1	Duration of Project	2
10,000 lb Rough Terrain Fork Lift	200	Diesel	1		5
Truck, Semi, Tractor	350	Diesel	1		1
ROW Clearing				14	
1 Ton Crew Cab 4X4	300	Diesel	1	9	8
Road Grader	350	Diesel	1	9	6
Track Type Dozer	350	Diesel	1	9	6
Water Truck	350	Diesel	2	9	9
Lowboy Truck/Trailer	500	Diesel	1	9	4
Backhoe/Front Loader	350	Diesel	1	14	6
Small Loader	50	Diesel	1	4	8
10-cu. Yd. Dump Truck	350	Diesel	2	4	8
Roads & Landing Work				16	
1 Ton Crew Cab 4X4	300	Diesel	2	16	2
Road Grader	350	Diesel	1	16	4
Track Type Dozer	350	Diesel	1	16	6
Drum Type Compactor	250	Diesel	1	16	4
Water Truck	350	Diesel	2	Duration	9
Lowboy/Truck/Trailer	500	Diesel	1	8	2
Backhoe/Front Loader	350	Diesel	1	16	6
Guard Structure Installation				10	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	10	6
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	1	10	6
Compressor	120	Diesel	1	10	4
Auger Truck	500	Diesel	1	10	6
Extendable Flat Bed Pole Truck	350	Diesel	1	10	6
80ft. Hydraulic Man-lift	350	Diesel	1	10	4
30 Ton Crane Truck	500	Diesel	1	10	6
Remove Existing Conductor and OHGW				9	
1 Ton Crew Cab 4X4	300	Diesel	4	9	8
80ft. Hydraulic Man-lift	350	Diesel	3	9	8
Sleaving Truck 300	300	Diesel	1	9	4
30 Ton Crane Truck	300	Diesel	1	9	4
40' Flat Bed Trailer	N/A	N/A	3	8	2
Truck, Semi, Tractor	350	Diesel	1	8	1
Bull Wheel Puller	500	Diesel	1	6	4
Hydraulic Rewind Puller	300	Diesel	1	6	4
Remove Existing Towers				16	
1 Ton Crew Cab, 4X4	300	Diesel	3	16	5
80 Ton Rough Terrain Crane	350	Diesel	1	8	8
30 Ton Crane Truck	300	Diesel	2	16	6
Compressor Truck	300	Diesel	2	8	8
Flat Bed Truck & Trailer	350	Diesel	1	7	8
Rough Terrain Forklift	200	Diesel	1	7	4

TABLE 2-6 (Continued)
CONSTRUCTION EQUIPMENT REQUIREMENTS

Work Activity Primary Equipment Description	Estimated Horse-power	Probable Fuel Type	Primary Equipment Quantity	Estimated Schedule (days)	Duration of Use (Hrs/Day)
Remove Existing Foundations				10	
10-cu. Yd. Dump Truck	350	Diesel	2	10	10
Backhoe Front Loader	350	Diesel	1	10	8
Excavator	300	Diesel	2	10	8
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	1	10	10
Install Tower Foundations				16	
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	16	2
30 Ton Crane Truck	300	Diesel	1	16	5
Backhoe Front Loader	200	Diesel	1	16	8
Auger Truck	500	Diesel	1	16	8
10 Cubic yard Dump Truck	350	Diesel	2	16	8
4000 Gallon Water Truck	350	Diesel	1	16	8
10 cu. yd. Concrete Mixer Truck	425	Diesel	3	16	3
Tower Steel Haul				12	
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	12	2
40' Flat Bed Truck & Trailer	350	Diesel	2	12	8
10,000 lb Rough Terrain Fork Lift	200	Diesel	1	12	6
Tower Steel Assembly				36	
30 Ton Crane Truck	300	Diesel	2	36	8
¾ Ton Pick-up Truck, 4X4	300	Diesel	3	36	4
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	36	4
Compressor Trailer	350	Diesel	2	36	6
Tower Erection				12	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	12	5
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	12	5
Compressor Trailer	350	Diesel	1	12	6
180 Rough Terrain Crane	500	Diesel	1	12	6
Install Tubular Pole Foundations				54	
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	3	54	2
30 Ton Crane Truck	300	Diesel	1	54	5
Backhoe/Front Loader	200	Diesel	1	54	8
Auger Truck	500	Diesel	1	54	8
10-cu. Yd. Dump Truck	350	Diesel	2	54	8
4000 Gallon Water Truck	350	Diesel	1	54	8
10cu. yd. Concrete Mixer Truck	425	Diesel	3	54	3
Tubular Pole Haul				27	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	27	5
40' Flat Bed Truck & Trailer	350	Diesel	2	27	8
180 Ton Rough Terrain Crane	500	Diesel	1	27	6
Tubular Pole Assembly				54	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	54	5
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	54	5
Compressor Trailer	120	Diesel	1	54	5
180 Ton Rough Terrain Crane	500	Diesel	1	54	6
Tubular Pole Erection				54	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	54	5
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	54	5
Compressor Trailer	120	Diesel	1	54	5
180 Ton Rough Terrain Crane	500	Diesel	1	54	6

TABLE 2-6 (Continued)
CONSTRUCTION EQUIPMENT REQUIREMENTS

Work Activity Primary Equipment Description	Estimated Horse- power	Probable Fuel Type	Primary Equipment Quantity	Estimated Schedule (days)	Duration of Use (Hrs/Day)
Install Conductor and optical ground wire				115	
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	5	115	8
Wire Truck & Trailer	350	Diesel	6	115	2
Dump Truck (Trash)	350	Diesel	1	115	2
¾ Ton Pick-up Truck, 4X4	300	Diesel	6	115	10
30 Ton Manitex	350	Diesel	4	115	6
22 Ton Manitex	350	Diesel	1	115	8
Splicing Rig	350	Diesel	2	115	2
Splicing Lab	300	Diesel	2	26	2
Pole Truck & trailer	500	Diesel	1	36	6
20,000lb. Rough Terrain Fork Lift	350	Diesel	1	115	2
580 Case Backhoe	120	Diesel	1	115	2
Spacing Cart	10	Diesel	3	29	8
Static Truck	350	Diesel	1	115	2
Static Tensioner	0	Diesel	1	115	2
3 Drum Straw line Puller	300	Diesel	2	115	4
601k Puller	525	Diesel	1	115	3
Sag Cat w2 winch	350	Diesel	2	115	2
D8 Cat	300	Diesel	4	115	1
Huges 500 E Helicopter		Jet A	1	26	6
Fuel, Helicopter Support Truck	300	Diesel	1	26	2
Low Boy Truck & Trailer	500	Diesel	1	115	2
Guard Structure Removal				10	
¾ Ton Pick-up Truck, 4X4	300	Diesel	2	10	6
1 Ton Crew Cab Flat Bed, 4X4	300	Diesel	2	10	6
Compressor Trailer	120	Diesel	2	10	4
Extendable Flat Bed Pole Truck	350	Diesel	2	10	6
80ft. Hydraulic Man-lift	350	Diesel	1	10	4
30 Ton Crane Truck	500	Diesel	1	10	6
Rector Substation				90	
Crew Truck	300	Diesel	2	40	4
Dump Truck	350	Diesel	2	40	3
5 Ton Stake Bed Truck	235	Diesel	1	40	2
Trencher	85	Diesel	1	10	8
Drill Rig	500	Diesel	1	10	8
Tractor	350	Diesel	1	40	7
Forklift	200	Diesel	1	40	4
Mobile Crane	300	Diesel	1	5	8
8 Ton Stake Truck	200	Diesel	1	90	4
Crew Cab Truck	300	Diesel	2	90	6
Carryall Vehicle	300	Gasoline	2	90	6
50 ton Crane	350	Diesel	1	45	8
Lift gate Truck	300	Diesel	1	90	4
Pickup	200	Diesel	2	90	4
Forklift	200	Diesel	1	90	8
Manlift	350	Diesel	2	90	8
Support Truck	300	Diesel	2	90	4
Carry Deck Crane	300	Diesel	1	10	8
Support Truck	300	Diesel	1	15	8
Wire Truck	350	Diesel	2	60	8
Test Truck	300	Diesel	1	60	8

**TABLE 2-6 (Continued)
CONSTRUCTION EQUIPMENT REQUIREMENTS**

Work Activity Primary Equipment Description	Estimated Horse- power	Probable Fuel Type	Primary Equipment Quantity	Estimated Schedule (days)	Duration of Use (Hrs/Day)
Big Creek 3 Substation Modifications				5	
8 Ton Stake Truck	200	Diesel	1	4	4
Crew Cab Truck	300	Diesel	2	4	6
50 Ton Crane	350	Diesel	1	3	8
Lift Gate Truck	300	Diesel	1	4	4
Pickup	200	Diesel	2	4	4
Forklift	200	Diesel	1	4	8
Manlift	350	Diesel	1	2	8
Support Truck	300	Diesel	2	4	4
Test Truck	300	Diesel	1	5	8
Wire Truck	350	Diesel	1	4	8
Springville Substation Modifications				5	
8 Ton Stake Truck	200	Diesel	1	3	4
Crew Cab Trucks	300	Diesel	2	3	6
50 Ton Crane	350	Diesel	1	2	8
Lift Gate Truck	300	Diesel	1	3	4
Pickup	200	Diesel	2	3	4
Forklift	200	Diesel	1	3	8
Manlifts	350	Diesel	1	2	8
Support Truck	300	Diesel	2	3	4
Test Truck	300	Diesel	1	5	8
Wire Truck	350	Diesel	1	3	8
Vestal Substation Modifications				5	
8 Ton Stake Truck	200	Diesel	1	3	4
Crew Cab Trucks	300	Diesel	2	3	6
50 Ton Crane	350	Diesel	1	2	8
Lift Gate Truck	300	Diesel	1	3	4
Pickup	200	Diesel	2	3	4
Forklift	200	Diesel	1	3	8
Manlift	350	Diesel	1	2	8
Support Truck	300	Diesel	2	3	4
Test Truck	300	Diesel	1	5	8
Wire Truck	350	Diesel	1	3	8
Restoration				20	
1 Ton Crew Cab 4X4	300	Diesel	2	20	2
Road Grader	350	Diesel	1	20	6
Backhoe	350	Diesel	1	20	6
Front End Loader	350	Diesel	1	20	6
Track Type Dozer	350	Diesel	1	20	6
Drum Type Compactor	250	Diesel	1	20	6
Water Truck	350	Diesel	1	20	10
Lowboy Truck/Trailer	300	Diesel	1	20	3

SOURCE: SCE, 2008b.

**TABLE 2-7
ESTIMATED CONSTRUCTION WORKFORCE**

Construction Activity	Crew Size	Proposed Project Requirements	Production Rate
Survey	One 4-person crew	19.7 miles	1 mile/day
Material Staging yards	One 4-person crew	--	--
Right-of-way clearing	One 5-person crew	2.3 miles	0.25 miles/day
Roads and landing work	One 5-person crew	8.0 miles	0.5 miles/day and 4 structure pads/day
Guard structure installation	One 6-person crew	80 structures	4 structures/day
Remove existing conductor optical groundwire	One 14-person crew	2.2 circuit miles	0.25 mile/day
Remove existing towers	One 6-person crew	26 towers	1.5 towers/day
Remove existing tower foundations	Two 4-person crews	26 towers	2.5 tower foundations (10 footings)/day
Install foundations for towers	One 9-person crew	12 towers	0.75 towers/day
Tower Steel haul	One 4-person crew	12 towers	1 tower/day
Tower Steel assembly	Two 7-person crews	12 towers	0.5 towers/day
Tower erection	One 8-person crew	12 towers	1 tower/day
Install foundations for poles	One 7-person crew	108 tubular poles	2 tubular poles/day
Pole haul	One 4-person crew	108 tubular poles	4 tubular poles/day
Pole assembly	One 8-person crew	108 tubular poles	2 tubular poles/day
Pole erection	One 8-person crew	108 tubular poles	2 tubular poles/day
Conductor and optical ground wire installation	Four 8-person crews	39.4 miles	0.35 miles/day
Guard structure removal	One 6-person crew	80 structures	4 structures/day
Rector Substation	One 8-person crew	See section 2.7.2	--
Big Creek 3 Substation	One 7-person crew	See section 2.7.2	--
Springville Substation	One 7-person crew	See section 2.7.2	--
Vestal Substation	One 7-person crew	See section 2.7.2	--
Restoration	One 7-person crew	19.7 miles	1 mile/day

SOURCE: SCE, 2008b.

**TABLE 2-8
PROPOSED CONSTRUCTION TIMETABLE**

Proposed Project Component	Duration (months)	Estimated Schedule
Material Staging Yard preparation	Less than 1	October 2012
ROW clearing, access road and structure pad construction	3	October – December 2012
Demolition of 1.1 miles of existing Big Creek 3 – Rector 220 kV transmission facilities	1	October 2012
Construction of 1.1 miles of new Big Creek 1-Rector and Big Creek 3 – Rector 220 kV double circuit transmission line	2	November – December 2012
Demolition of 1.1 miles of existing Big Creek 1-Rector 220 kV transmission facilities	1	January 2013
Construction of 18.5 miles of new 220 kV double circuit transmission line	10	January – October 2013
Post construction clean-up and restoration	1	November 2013

SOURCE: SCE, 2008b.

requirements, weekend, evening, and night work may also be required due to the scheduling of system outages and construction schedules. Construction would commence following CPUC approval, final engineering and procurement activities. The Proposed Project is currently scheduled to begin operation in October 2012.

2.8 Operation and Maintenance

2.8.1 220 kV Transmission Lines

The transmission facilities associated with the Proposed Project would be inspected, maintained, and repaired following completion of construction in a manner consistent with good maintenance and repair practices. This involves both routine preventative maintenance and emergency procedures to maintain service continuity. Aerial and ground inspections of project facilities would be performed. Components would be inspected annually, at a minimum, for corrosion, equipment misalignment, loose fittings and other common mechanical problems.

The access and spur roads constructed as part of the Proposed Project would be inspected, maintained, and repaired following the completion of construction in a manner consistent with SCE's road maintenance and repair practices. This involves both routine preventive maintenance and emergency response procedures to maintain continuity of access to SCE's transmission facilities. At a minimum, during the annual aerial and/or ground inspections of the transmission facilities, the roads would also be inspected for damage.

Maintenance of the transmission facilities would include limitations on certain land uses and maintenance of vegetation height within the ROW. Land uses that would typically be permitted within the ROW after project completion include agricultural and landscaping, underground facilities, biking and hiking trails, and automotive vehicle parking. Specific requirements associated with these activities include:

Agricultural and landscaping

- Vegetation must maintain standard clearances from structures (typically 50 feet);
- Shrubs and trees must be maintained not to exceed 15 feet maximum height;
- Some trees (i.e., walnut) and shrubs would be subject to species limitations specified by SCE.

Underground facilities, such as utility services and irrigation systems

- A minimum of 36 inches of cover measured from the top of the conduit or pipe to the surface of the ground must be maintained;
- Facility must be able to withstand a gross load of 40 tons on three axles;
- No valves or controllers of any type would be permitted in the ROW
- No parallel or longitudinal encroachments would be permitted;
- All underground improvements crossing in the ROW must be perpendicular to the centerline of the ROW.

Biking and Hiking Trails

- Permitted at low intensity use.

Automotive vehicle parking

- Reviewed on a case-by-case basis.

2.8.2 Substations

Rector Substation, Big Creek 3 Substation, Springville Substation, and Vestal Substation are all existing substations. The Rector Substation is a staffed substation. Current on-going routine operations and maintenance activities would be sufficient and no additional activities would be required under the Proposed Project.

2.9 Electric and Magnetic Fields Summary

2.9.1 Electric and Magnetic Fields

This EIR does not consider electric and magnetic fields (EMF) in the context of the CEQA analysis of potential environmental impacts because [1] there is no agreement among scientists that EMF creates a potential health risk, and [2] there are no defined or adopted CEQA standards for defining health risk from EMF. However, recognizing that there is a great deal of public interest and concern regarding potential health effects from human exposure to EMF from transmission lines, this document does provide information regarding EMF associated with electric utility facilities and human health and safety. Thus, the EMF information in this EIR is presented for the benefit of the public and decision makers.

Potential health effects from exposure to *electric fields* from transmission lines (i.e., the effect produced by the existence of an electric charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) typically do not present a human health risk since electric fields are effectively shielded by materials such as trees, walls, etc. Therefore, the majority of the following information related to EMF focuses primarily on exposure to *magnetic fields* (i.e., the invisible fields created by moving charges) from transmission lines. Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix D.

After several decades of study regarding potential public health risks from exposure to power line EMF, research results remains inconclusive. Several national and international panels have conducted reviews of data from multiple studies and state that there is not sufficient evidence to conclude that EMF causes cancer. Most recently the International Agency for Research on Cancer (IARC) and the California Department of Health Services (DHS) both classified EMF as a *possible* carcinogen.

Presently, there are no applicable federal, State or local regulations related to EMF levels from power lines or related facilities, such as substations. However, the California Public Utilities Commission has implemented a decision (D.06-01-042) requiring utilities to incorporate “low-

cost” or “no-cost” measures for managing EMF from power lines up to approximately four percent of total project cost. Using the four percent benchmark, SCE has incorporated low-cost and no-cost measures to reduce magnetic field levels along the transmission corridor.

2.9.2 EMF and the Proposed Project

SCE has conducted a design comparison of calculated magnetic field levels for both the 1.1 mile replacement section and the 17.4 miles of new transmission line. Figure 2-9 and Table 2-9 show a comparison of magnetic field levels for the existing design and the Proposed Project within the existing 1.1 miles of ROW and the calculated magnetic field levels for the Proposed Project within the new 17.4 miles of ROW.

**TABLE 2-9
COMPARISON OF CALCULATED MAGNETIC FIELDS AT EDGES OF RIGHT OF WAY**

Design Options	Left ROW (mG)	% Reduction	Right ROW (mG)	% Reduction
1.1-Mile Replacement Segment (Existing ROW)				
Existing 220 kV Design	85.9	Base	77.6	Base
Proposed 220 kV Design	15.8	81.6	17.0	78.1
Proposed 220 kV Design + 10 Feet	12.9	18.4	14.7	13.5
17.4-Mile New Transmission Line Segment (New ROW)				
Proposed 220 kV Design	12.3	Base	35.7	Base
Proposed 220 kV Design + 10 Feet	11.0	10.6	26.2	26.6

NOTE: This table lists calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

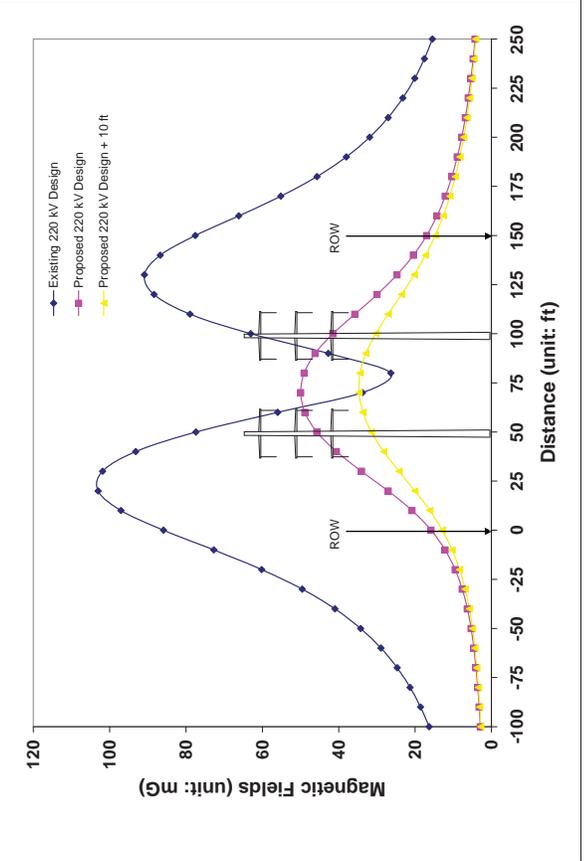
SOURCE: SCE, 2008b.

In accordance with the EMF Design Guidelines, filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, the proposed project would implement the following “no-cost and low-cost” magnetic field reduction measures. The field reduction measures would include:

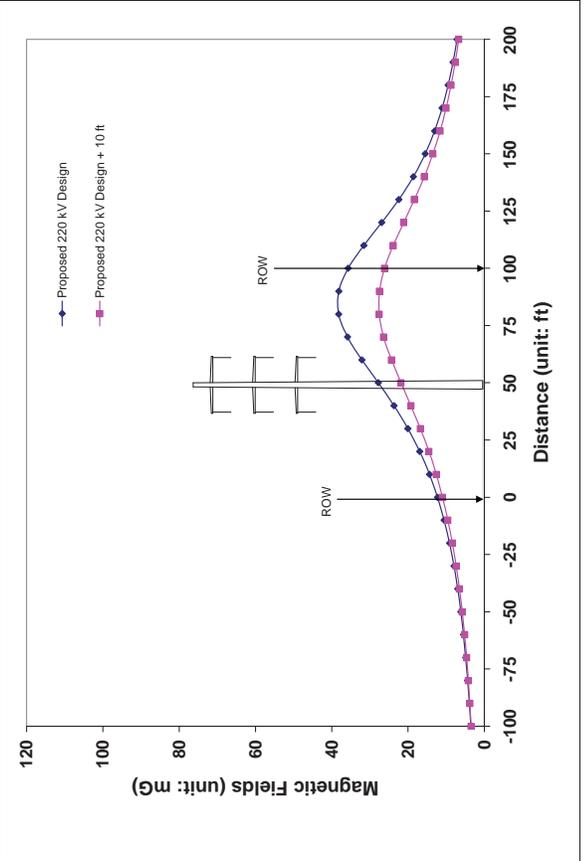
For the 220 kV Transmission Line Alignment (first 1.1 miles north of Rector Substation, existing ROW)

- Using a double circuit pole-head configuration for the proposed 220 kV lines.
- Using poles which are 10 feet taller where homes are immediately adjacent to the edges of the ROW; and
- Implementing phasing arrangements to reduce magnetic field levels at edge(s) of ROW. Recommended phasing arrangements are as follows:
 - Big Creek 3-Rector No 1 220 kV : A-C-B (top to bottom)
 - Big Creek 1-Rector 220 kV : B-C-A (top to bottom)
 - Big Creek 3-Rector No. 2 220 kV – B-A-C (top to bottom)
 - Rector-Springville 220 kV : C-A-B (top to bottom)

A Design Comparison of Calculated Magnetic Field Level¹ from Reactor Substation to Mile 1.1 Existing 220kV Transmission Line vs the Proposed Project



A Design Comparison of Calculated Magnetic Field Level¹ from Mile 1.1 to the Big Creek-Springville Transmission Line tie-in point



¹ This graph depicts calculated magnetic field levels for design comparison only and is not meant to predict actual magnetic field levels.

For the 220 kV Transmission Line Alignment (17.4 miles of new ROW)

- Using a double circuit pole-head configuration for the proposed 220 kV transmission lines.
- Using poles which are 10 feet taller where homes are immediately adjacent to the edges of the ROW.
- Implementing phasing arrangements to reduce magnetic field levels at edges of ROW. Recommended phasing arrangements are as follows:
 - Big Creek 3-Rector No. 2 220 kV : B-A-C (top-to-bottom)
 - Rector-Springville 220 kV : C-A-B (top-to-bottom)

2.10 Required Permits and Approvals

The CPUC is the CEQA lead agency for the Proposed Project. SCE would obtain permits, approval or licenses as need from, and would participate in reviews and consultation as needed with, federal, State and local agencies as show in Table 2-10.

**TABLE 2-10
SUMMARY OF PERMITS REQUIREMENTS**

Permit/Approval/Consultation	Agency	Jurisdiction/Purpose
Federal Agencies		
Section 7 Consultation, Endangered Species Act	U.S. Fish and Wildlife Service	Construction, operation, and maintenance on land that may affect a federally listed species or its habitat; incidental take authorization (if required)
Section 10 of the Rivers and Harbors Act	U.S. Army Corps of Engineers	Construction across Navigable Waters
Nationwide or Individual Permit (Section 404 of the Clean Water Act)	U.S. Army Corps of Engineers	Construction impacting Waters of the United States, including wetlands
Section 106 Review, National Historic Preservation Act	Advisory Council on Historic Preservation	Construction, operation, and maintenance on land that may affect cultural or historic resources
State Agencies		
Certificate of Public Convenience and Necessity	California Public Utilities Commission	Overall project approval and California Environmental Quality Act review
National Pollutant Discharge Elimination System Construction Storm water Permit	RWQCB	Storm water discharges associated with construction activities disturbing more than one acre of land
Section 401 Water Quality Certification (or waiver)	RWQCB	Certifies that project is consistent with state water quality standards
Encroachment Permit	California Department of Transportation	Construction, operation, and maintenance within, under, or over state highway ROW
Endangered Species Consultation	California Department of Fish and Game	Construction, operation, and maintenance that may affect a state-listed species or its habitat; incidental take authorization (if required)
Local Agencies		
Encroachment Permit (ministerial)	City of Visalia City of Farmersville Tulare County	Construction, operation, and maintenance within, under, or over city road ROW

References – Project Description

Southern California Edison Company (SCE) 2008a. Application of Southern California Edison Company for a Certificate of Public Convenience and Necessity to Construct the San Joaquin Cross Valley Loop Transmission Project. Filed May 30, 2008.

SCE 2008b. Proponent's Environmental Assessment San Joaquin Cross Valley Loop Project. Filed May 30, 2008.

SCE 2008c. Response to Data Request #1. June 17, 2008.

SCE 2008d. Response to Data Request #2. June 23, 2008.

SCE 2008e. Response to Data Request #3. August 7, 2008.

SCE 2008f. Response to Data Request #4. August 21, 2008.

SCE 2008g. Response to Data Request #5. November 26, 2008.

SCE 2009. Response to Data Request #6. February 6, 2009.

CHAPTER 3

Alternatives and Cumulative Projects

This chapter documents (1) the range of alternatives that was suggested and evaluated; (2) the approach and methods used to screen the feasibility of these alternatives according to guidelines established under CEQA; and (3) the results of the alternatives screening. This section is organized as follows: Section 3.1 is an overview of the alternatives screening process; Section 3.2 describes the methodology used for alternatives evaluation; Section 3.3 presents a summary of which alternatives have been selected for full EIR analysis and which have been eliminated based on CEQA criteria; Section 3.4 describes the alternatives that have been retained for full EIR analysis, including the No Project alternative; and Section 3.5 presents descriptions of each alternative that was eliminated from EIR analysis and explains why each was eliminated. Finally, Section 3.6 identifies and describes the other past, present, and reasonably foreseeable future projects that are considered in the cumulative impact analysis for this EIR.

3.1 Alternatives Development and Screening Process

One of the most important aspects of the environmental review process is the identification and assessment of reasonable alternatives that have the potential for avoiding or minimizing the significant impacts of a proposed project. In addition to mandating consideration of the No Project Alternative, CEQA Guidelines (Section 15126(d)) emphasize the selection of a reasonable range of technically feasible alternatives and adequate assessment of these alternatives to allow for a comparative analysis for consideration by decision makers. CEQA Guidelines state that the discussion of alternatives shall focus on alternatives capable of eliminating or reducing significant adverse environmental effects of a proposed project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. However, CEQA Guidelines declare that an EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote or speculative.

Numerous alternatives to the Proposed Project were suggested during the scoping period (August 22, 2008 to September 22, 2008). Other alternatives were presented by SCE in its PEA, or developed by the EIR preparers.

In total, the alternatives screening process has culminated in the identification and screening of approximately 11 potential alternatives for SCE's proposed San Joaquin Cross Valley Loop Transmission Project. These alternatives range from different alignments to various reconductoring options as well as "Non-wires alternatives"¹.

¹ "Non-wires alternatives" include methods of meeting project objectives that do not require major transmission lines (e.g., renewable energy supplies, conservation and demandside management, etc.).

3.2 Alternatives Screening Methodology

The evaluation of alternatives to the proposed San Joaquin Cross Valley Loop Transmission Project was completed using a screening process that consisted of three steps:

Step 1: Clarify the description of each alternative to allow comparative evaluation.

Step 2: Evaluate each alternative using CEQA criteria (defined below).

Step 3: Determine the suitability of each alternative for full analysis in the EIR. Infeasible alternatives and alternatives that clearly offered no potential for overall environmental advantage were removed from further analysis.

Following the three-step screening process, the advantages and disadvantages of the remaining alternatives were carefully weighed with respect to CEQA's criteria for consideration of alternatives. These criteria are discussed in greater detail below.

CEQA Guidelines (Section 15126(a)) state that:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.

In order to comply with CEQA's requirements, each alternative that has been suggested or developed for this project has been evaluated in three ways:

- Does the alternative meet most basic project objectives?
- Is the alternative feasible (legal, regulatory, technical)?
- Does the alternative avoid or substantially lessen any significant effects of the Proposed Project (including consideration of whether the alternative itself could create significant effects potentially greater than those of the Proposed Project)?

3.2.1 Consistency with Project Objectives

CEQA Guidelines require the consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives" (Section 16126.6(b)). Therefore, it is not required that each alternative meet all of the project objectives.

The objectives of the Proposed Project are defined by SCE in its PEA (SCE, 2008). This EIR does not adopt or endorse the objectives that SCE has defined for its Proposed Project. SCE's defined objectives are presented below.

SCE's Proposed Project Objectives

- Provide safe and reliable electric service consistent with NERC/WECC and CAISO reliability criteria;

- Provide safe and reliable electric service consistent with SCE’s electrical system planning guidelines;
- Increase transmission capacity between Big Creek Hydroelectric Project and Rector Substation to mitigate overload conditions;
- Reduce the need to interrupt customer electrical service under transmission line outage conditions;
- Minimize the need to reduce Big Creek Hydroelectric Project generation under transmission line outage conditions;
- Minimize electrical service interruptions to customers by scheduling the construction of new facilities in an orderly and rational manner;
- Meet project need while minimizing environmental impact; and
- Meet project need and construction schedule in a cost effective manner.

The EIR team requested additional technical data from SCE and conducted an independent assessment of that information to better define the most important basic objectives of the Proposed Project for use in the alternatives screening process. SCE prepared two technical papers, *System Strength and Short Circuit Duty (SCD)/Short Circuit Ratio (SCR) Analysis* and *San Joaquin Cross Valley Loop Project Supplemental Routing Analysis*, which are presented in Appendix D of this EIR. These SCE technical papers and the additional analysis by the EIR team helped to clarify that “safe and reliable electric service” in the Electrical Needs Area is currently limited by two critical system constraints: power flow capacity and system strength.

Limited power flow capacity is most acute in the summer (peak load) season, when the existing Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines simply cannot move enough electricity from the Big Creek Hydroelectric Project to meet the demand at the Rector Substation. This results in thermal overload (overheating) of the lines, which in turn results in reduced voltage in the system (brown-outs) and/or dropped load (black-outs).

The system strength analysis is a more complex measure of the transmission system to provide safe and reliable electrical service. Four factors are used to measure the adequacy or sufficiency of the transmission system strength:

- System thermal capacity;
- System post-transient voltage stability;
- System dynamic stability; and
- System short circuit duty (SCD).

This system strength analysis showed the existing Rector Substation system to be the “weakest” load-serving substation in the entire SCE service territory, and that improving the system strength was a critical objective of the Proposed Project.

The supplemental routing sensitivity analysis evaluated the effectiveness of various alternative routing configurations in addressing both the power flow constraint as well as the system strength constraint in the existing system. While several routing configurations were shown to help alleviate the power flow constraint, only loop configurations (i.e., looping the under-utilized Big Creek-Springville 220 kV lines into the Rector Substation) would also result in a meaningful improvement in system strength. Further, the electrical effectiveness of different loop alignments was shown to be nearly identical for tap points located north of the Rector Substation, whereas electrical effectiveness decreased substantially for tap points located south of the Rector Substation.

Consequently, the EIR team determined that to be considered for further analysis an alternative would have to meet both of the following basic objectives of the Proposed Project:

- Substantially improve power flow capabilities; and
- Substantially improve system strength.

3.2.2 Feasibility

CEQA Guidelines (Section 15364) define feasibility as:

. . . capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

In addition, CEQA requires that the Lead Agency consider site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, jurisdictional boundaries, and proponent's control over alternative sites in determining the range of alternatives to be evaluated in the EIR (CEQA Guidelines Section 15126.6(f)). Feasibility can include three components:

- **Legal Feasibility:** Does the alternative have the potential to avoid lands that have legal protections that may prohibit or substantially limit the feasibility of permitting a 220 kV transmission line?
- **Regulatory Feasibility:** Does the alternative have the potential to avoid lands that have regulatory restrictions that may substantially limit the feasibility of, or permitting of, a 220 kV transmission line within a reasonable period of time?
- **Technical Feasibility:** Is the alternative feasible from a technological perspective, considering available technology; the construction, operation, and maintenance or spacing requirements of multiple facilities using common rights-of-way (ROW); and the potential for common mode failure?

For the screening analysis, the legal, technical, and regulatory feasibility of potential alternatives was assessed. The assessment was directed toward reverse reason; that is, a determination was made as to whether there was anything about the alternative that would be infeasible on technical, legal, or regulatory grounds.

This screening analysis does not focus on relative economic factors or costs of the alternatives (as long as they are found to be economically feasible) since CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may “impede to some degree the attainment of project objectives or would be more costly” (CEQA Guidelines Section 16126.6(b)).

3.2.3 Potential to Eliminate Significant Environmental Effects

CEQA requires that to be fully considered in an EIR, an alternative must have the potential to “avoid or substantially lessen any of the significant effects of the project” (CEQA Guidelines Section 16126.6(a)).

If an alternative was identified that clearly would not provide potential overall environmental advantage as compared to the Proposed Project, it was eliminated from further consideration. At the screening stage, it is neither possible, nor legally required, to evaluate all of the impacts of the alternatives in comparison to the Proposed Project with absolute certainty, nor is it possible to quantify impacts. However, it is possible to identify elements of an alternative that are likely to be the sources of impact and to relate them, to the extent possible, to general conditions in the subject area.

Table 3-1 presents a summary of the potential significant environmental effects of the Proposed Project. The impacts in the Table 3-1 are representative of those resulting from preliminary EIR preparation and were therefore used to determine whether an alternative met CEQA Guidelines Section 16126.6(a) requirements.

3.3 Summary of Screening Results

Table 3-2 provides a composite list of the alternatives considered, and the results of the screening analysis with respect to the criteria findings for consistency with project objectives, feasibility and environmental effectiveness. Alternatives carried forward for full EIR analysis are listed below in Section 3.3.1. Alternatives eliminated from further consideration follow in Section 3.3.2.

3.3.1 Alternatives Analyzed in the EIR

The alternatives listed below are those that have been selected through the alternative screening process for detailed EIR analysis; the No Project alternative is also included as required by CEQA. Each of the alignment alternatives would substantially meet project objectives, would be feasible, and would avoid or reduce potential environmental effects of the Proposed Project. The alternatives are illustrated in Figure 3-1, and briefly described in Table 3-2 as well as in greater detail in Section 3.4.

- No Project
- Alternative 2
- Alternative 3
- Alternative 6

**TABLE 3-1
SUMMARY OF PRELIMINARY SIGNIFICANT ENVIRONMENTAL IMPACTS
OF THE PROPOSED PROJECT**

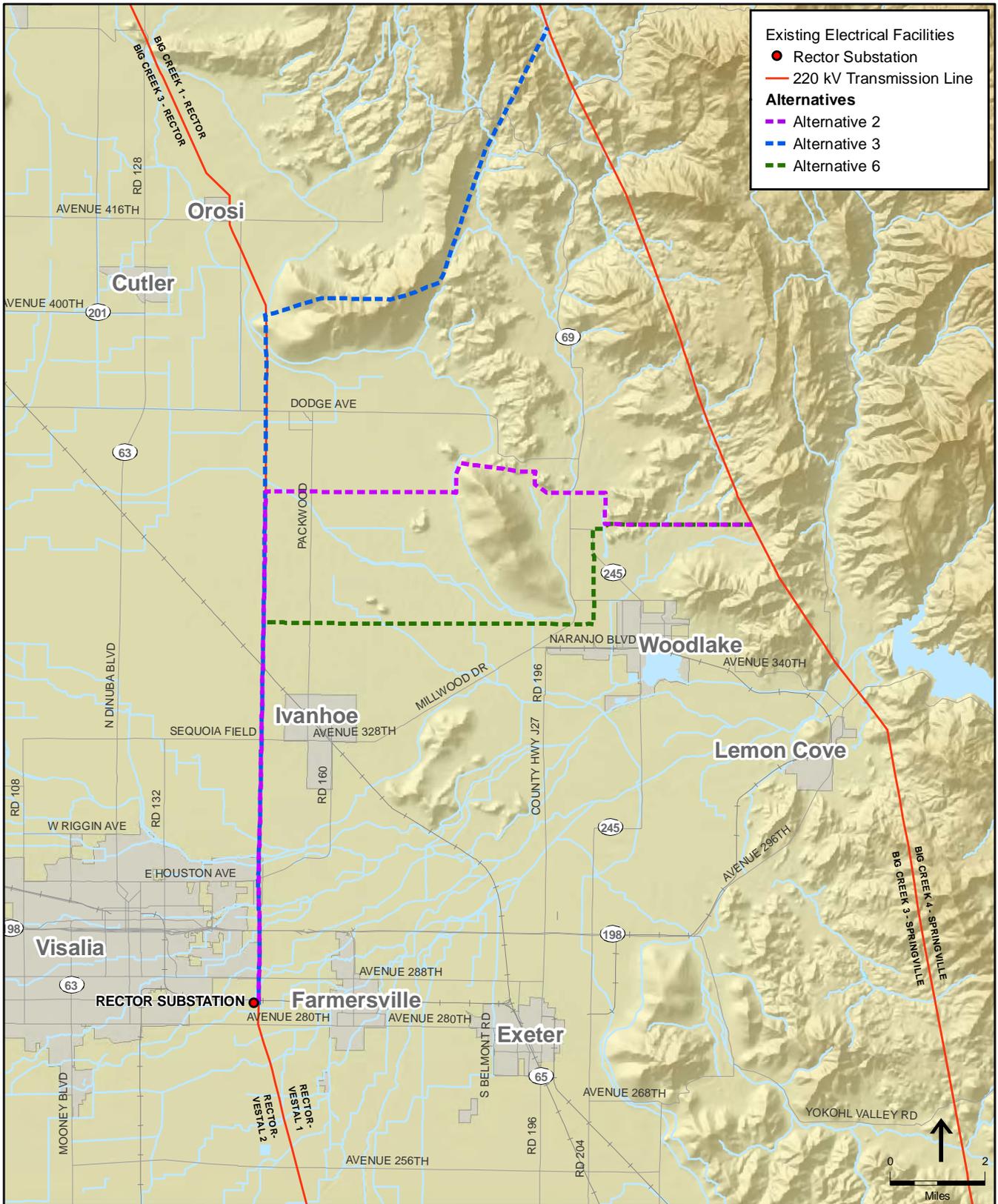
Issue Area	Impact
Aesthetics	<ul style="list-style-type: none"> • Degradation of eligible scenic highway (State Route (SR) 198) viewshed where no transmission line currently exists • Degradation of viewshed due to replacement of lattice towers with taller poles and modifications at substations
Agriculture	<ul style="list-style-type: none"> • Permanent removal of Farmland and removal of walnut orchards from production
Air Quality	<ul style="list-style-type: none"> • Short-term equipment exhaust emissions could require Indirect Source Review • Permanently disturbed land that could degrade air quality as a source of fugitive dust emissions
Biological Resources	<ul style="list-style-type: none"> • Permanent impacts to wetlands, rare plants and habitat that could support kit fox, burrowing owl, and vernal pool fairy shrimp
Cultural Resources	<ul style="list-style-type: none"> • Construction disturbance to recorded and/or unknown cultural and historic resources • Permanent impacts to the Big Creek Hydroelectric System Historic District
Geology, Soils, and Mineral Resources	<ul style="list-style-type: none"> • Soil erosion or loss of top soil through construction-related soil disturbance and use of new access roads for maintenance
Hazards and Hazardous Materials	<ul style="list-style-type: none"> • Impacts to surface or groundwater from construction-related use of hazardous materials • Construction-related short-term impacts from blasting • Construction-related short-term and long-term potential to create wildfires • Create permanent safety hazard to aerial spray applicators
Hydrology and Water Quality	<ul style="list-style-type: none"> • Degradation of water quality through sedimentation or construction-related erosion
Land Use and Planning	<ul style="list-style-type: none"> • Potential conflict with the City of Farmersville General Plan
Noise	<ul style="list-style-type: none"> • Construction-related short-term noise impacts on sensitive land uses • Continuous operational noise from substations and/or transmission line corona
Population and Housing	<ul style="list-style-type: none"> • Permanent removal of one home
Public Services	<ul style="list-style-type: none"> • Short-term increase of demand for fire and police services • Short-term construction interruption to emergency vehicle access and response times.
Transportation and Traffic	<ul style="list-style-type: none"> • Short-term closures or traffic controls on highways and roads during construction • Short-term construction interruption to pedestrian/bicycle/vehicular traffic, public transit, property access, and/or emergency response vehicles

**TABLE 3-2
SUMMARY OF ALTERNATIVES SCREENING ANALYSIS
SCE'S SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT**

Alternative	Project Objectives Criteria	Feasibility Criteria	Environmental Criteria
<i>Passes Screening</i>			
Alternative 2 <ul style="list-style-type: none"> • Follows alignment several miles north of Proposed Project • Uses 10.8 miles of existing ROW • Avoids communities of Farmersville and Lemon Cove • Total length, 4.5 miles longer than Proposed Project 	Meets both basic project objectives.	Meets feasibility criteria.	Meets environmental criteria, although may result in different types of impacts than the Proposed Project.
Alternative 3 <ul style="list-style-type: none"> • Follows alignment several miles north of Proposed Project • Uses 14.6 miles of existing ROW • Avoids communities of Farmersville and Lemon Cove • Total length, 5.8 miles longer than Proposed Project • Requires construction of more roads to access difficult terrain 	Meets both basic project objectives.	Meets feasibility criteria.	Meets environmental criteria, although may result in different types of impacts than the Proposed Project.
Alternative 6 <ul style="list-style-type: none"> • Follows alignment several miles north of Proposed Project • Uses approximately 8.1 miles of existing ROW • Passes through fewer walnut orchards • Total length, two miles longer than Proposed Project 	Meets both basic project objectives.	Meets feasibility criteria.	Meets environmental criteria, although may result in different types of impacts than the Proposed Project.
<i>Fails Screening</i>			
Alternative 4 <ul style="list-style-type: none"> • Alignment is located south of Proposed Project • Requires all new ROW • Similar construction as Proposed Project 	Fails. Does not meet reliability criteria. Criteria violation was associated with system voltage drops that are not allowable under N-1 line outage conditions.	Meets feasibility criteria.	Meets environmental criteria, although may result in different types of impacts than the Proposed Project.
Alternative 5 <ul style="list-style-type: none"> • Shifts a portion of the alignment one to two miles north of Proposed Project • Passes through agricultural areas similar to Proposed Project • Uses slightly more existing ROW 	Meets both basic project objectives.	Meets feasibility criteria.	Would not reduce impacts to the environment compared to the Proposed Project.

**TABLE 3-2 (Continued)
SUMMARY OF ALTERNATIVES SCREENING ANALYSIS
SCE'S SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT**

Alternative	Project Objectives Criteria	Feasibility Criteria	Environmental Criteria
<i>Fails Screening (cont.)</i>			
Reconductoring <ul style="list-style-type: none"> Replacement of conductor with increased capacity conductor on existing poles for Magunden-Rector, Rector-BC1 and Rector-BC3 lines 	Fails. Does not meet reliability criteria. Would not improve system strength.	Meets feasibility criteria.	Meets environmental criteria.
Replacement <ul style="list-style-type: none"> Remove existing tower lines and reconstruct with one double-circuit line for Magunden-Rector, Rector-BC1 and Rector-BC2 	Fails. Does not meet reliability criteria. Fails to improve system stability under outage conditions.	Fails. Only replacement alternative that could possibly meet reliability criteria would require a minimum of four seasons to construct.	Meets environmental criteria.
System Alternative <ul style="list-style-type: none"> New 220kV transmission line Magunden-Rector-BC3 (or BC1) Widen existing ROW (130 miles) Build with double-circuit poles for future upgrades 	Fails – Does not meet reliability criteria – issues are the same as the Replacement alternative above.	Meets feasibility criteria.	Due to increased project length, is likely to result in increased environmental impacts compared to Proposed Project.
System Alternative <ul style="list-style-type: none"> Loop Springville-Magunden Line into Vestal Substation Upgrade Vestal-Rector (new line, reconstruct, or reconductor) 	Fails. Does not meet criteria for increased power flow from Big Creek.	Meets feasibility criteria.	Meets environmental criteria.
Non-Wires – Demand Management Conservation <ul style="list-style-type: none"> Replace need for transmission line loop through implementation of energy conservation program 	Fails. Would not improve either the power flow or system strength objectives for the Proposed Project.	Fails. These programs are not feasible on a scale that would be suitable to replace the Proposed Project within a reasonable period of time.	Meets environmental criteria. Complete avoidance of the Proposed Project would eliminate the potential impacts of the construction, operation and maintenance of the transmission line and substation upgrade, and no new significant impacts would be created.
Non-Wires – New Generation <ul style="list-style-type: none"> Renewable or Conventional/Distributed Generation Provide local sources of electricity that would not require the upgrade of the transmission line or substations 	Fails. There is limited potential for local renewable resources or distributed generation to meet the power flow or system strength objectives for the Proposed Project.	Fails. Because even local renewable or distributed resources would require upgraded or new transmission infrastructure.	Fail. Large scale geothermal, wind, or solar facilities would potentially result in greater environmental impacts for aesthetics, cultural, and biological resources, and would occur in addition to the impacts from upgraded or new transmission infrastructure.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 3-1
Alternatives Overview

3.3.2 Alternatives Eliminated from EIR Consideration

The alternatives that have been eliminated through the alternative screening process from EIR analysis are listed below. As summarized in Table 3-2, these alternatives have been eliminated due to project objectives and feasibility concerns and in some cases because the alternative would have greater environmental impacts than the Proposed Project. The rationale for elimination of each alternative is summarized in Table 3-2 and is described in greater detail in Section 3.5.

- Alternative 4 – alignment variation
- Alternative 5 – alignment variation
- Reconductoring
- Replacement
- System Alternatives
- “Non-Wires” – Demand Management Conservation
- “Non-Wires” – New Generation
 - Conventional/Distributed Generation
 - Renewable Energy

3.4 Alternatives Evaluated in this EIR

3.4.1 Alternative 2

Description

Alternative 2 includes a transmission line loop following a different alignment than the Proposed Project. Modifications to the Rector, Springville, Vestal, and Big Creek 3 substations would be the same as under the Proposed Project. The Alternative 2 alignment would be approximately 23 miles long using 10.8 miles of existing ROW and require the acquisition of 12.2 miles of new ROW (Appendix C). Within the 10.8 miles of existing ROW, the Proposed Project would require the consolidation of two sets of single circuit lattice towers with double circuit tubular poles along the western side of the ROW. The first 10.8 miles of new double circuit transmission line would be built within the eastern side of the existing ROW.

Alternative 2 would begin at Rector Substation and head due north, following the existing SCE ROW for approximately 10.8 miles. At mile 10.8, the alignment would turn east for 3.5 miles. From mile 14.3 to mile 15.0, the alignment would turn north to parallel Road 176 until Avenue 376. The alignment would then proceed east, paralleling Avenue 376 and then southeast through a saddle along the base of Colvin Mountain until Road 194. From mile 17.3 to mile 17.9 the alignment would extend south and then southeast to Road 196. From there, the alignment would continue east for approximately 1.2 miles and then south for approximately 0.6 miles. At mile 19.7, the alignment would turn east along the base of Lone Oak Mountain and continue east until it reached the existing Big Creek 3-Springville 220 kV transmission line at a point approximately 52 miles south of the Big Creek Powerhouse No. 3. The total length of Alternative 2 would be approximately 23 miles.

Temporary disturbance for structure work areas would be the same under this alternative as for the Proposed Project on a per-pole/tower basis. The total number of work areas for pole/tower installation and removal would be higher under this alternative as there would be approximately 44 additional new structures compared to the Proposed Project, for a total of 149 tubular steel poles and 15 steel lattice towers. Similar to the Proposed Project, the majority of work areas would be located within the ROW (either existing or acquired). Work areas (i.e., tensioning, stringing, and pulling sites) would be required outside of the ROW at Alternative 2 Structures #5, #74, #78, #87, #89, #97, #100, and #115 (see Appendix C, Section 1, *Alternative 2 Road Story*). Table 3-3 and Table 3-4 summarize Alternative 2 metrics and access road requirements, respectively.

**TABLE 3-3
SUMMARY OF TYPICAL POLE INSTALLATION METRICS FOR ALTERNATIVE 2**

	Single Circuit Lattice Tower	Double Circuit Lattice Tower	Double Circuit Tubular Pole	Single Phase Tap Pole
Poles/Towers Removed	184	0	0	0
Poles/Towers Installed	0	15	149	0
Height (feet above ground surface)	63	120 - 160	120 - 160	120 - 160
Construction set up area at each structure	NA	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)
Number of foundations required	NA	4	1	1
Excavation diameter (feet)	NA	3 to 6	6 to 10	6 to 10
Excavation depth (feet)	NA	15 to 30	20 to 60	20 to 60

SOURCE: SCE, 2008

**TABLE 3-4
SUMMARY OF ACCESS ROAD REQUIREMENTS FOR ALTERNATIVE 2**

Type of Road	Description	Miles	Acreage ^a
New Permanent Access Roads	Would be 20 feet wide, with 16 feet of road and two feet of berms on each side. No other preparation required although crushed rock may need to be applied in very limited areas for traction.	11.4	27.63
Existing Access and Spur Roads	Various types of access and spur roads to be used including paved roads and dirt ranch roads	10.6	Unknown as road widths vary

^a Based on typical road width of 20 feet.

SOURCE: This table represents an approximation based upon information for Alternative 2 provided by the project applicant.

Vegetation clearance and disturbance requirements would be similar to the Proposed Project but the acreages involved would be different. The requirements for Alternative 2 are shown below:

- Temporary disturbance area (i.e., vegetation clearing and grading to be restored following completion of construction): 126 acres.
- Permanent disturbance area (i.e., access roads and 50-foot clearance areas surrounding structures): 48 acres.

Implementation of this alternative would include similar construction, operation and maintenance activities to those activities described for the Proposed Project except the Alternative 2 alignment would take approximately 20 months to construct assuming there are no outage constraints. Given that combined work activities in the existing ROW are expected to exceed six months, an additional six to 12 months may be required to work around the April 1 through October 1 outage restrictions. Table 3-5 below summarizes the length of time anticipated to construct each phase of Alternative 2. This alternative is 4.5 miles longer and involves replacement of existing structures on 9.7 more miles than the Proposed Project requiring the removal and installation of more towers and poles than under the Proposed Project.

**TABLE 3-5
CONSTRUCTION TIMETABLE FOR ALTERNATIVE 2**

Alternative 2 Construction Activity	Duration (months)
Material Staging Yard preparation	Less than 1
Demolition of 10.8 miles of existing Big Creek 3-Rector 220 kV transmission facilities	4
Construction of 10.8 miles of new Big Creek 1-Rector and Big Creek 3-Rector 220 kV double circuit transmission line	6
Demolition of 10.8 miles of existing Big Creek 1-Rector 220 transmission facilities	4
Construction of 10.8 miles of new Cross Valley 220kV Double Circuit Transmission Line within the Big-Creek Rector Corridor	6
Construction of 12.2 miles of new Cross Valley 220kV Double Circuit Transmission Line across the San Joaquin Valley	7
Construction of new Cross Valley 220kV Double Circuit Transmission Line tap into Big Creek-Springville Corridor	1
Post construction clean-up and restoration	2

SOURCE: SCE, 2009

Rationale for Full Analysis

Project Objectives

This alternative would meet both basic project objectives.

Feasibility

This alternative would meet all legal, regulatory, and technical feasibility criteria. Additional ROW easements would have to be negotiated with property owners to gain easements for the new ROW. However, SCE can choose to pursue legal condemnation should negotiations fail to result in equitable agreements.

Lessen Significant Environmental Impacts

Similar to the Proposed Project, Alternative 2 would result in significant unmitigable impacts to agricultural and cultural resources. This alternative would result in the permanent removal of fewer acres of Farmland than the Proposed Project and would also permanently remove fewer acres of walnut orchards from production. Impacts on cultural resources would be generally similar as under the Proposed Project.

Potential New Impacts Created

Alternative 2 would result in impacts to additional sensitive biological resources (i.e., Critical Habitat) and although potential impacts would be mitigated to less than significant, impacts would be greater than under the Proposed Project.

3.4.2 Alternative 3

Description

Alternative 3 includes a transmission line loop following a different alignment than the Proposed Project. Modifications to the Rector, Springville, Vestal, and Big Creek 3 substations would be the same as under the Proposed Project. The Alternative 3 alignment would be approximately 24.3 miles long, would use 14.6 miles of existing ROW and would require the acquisition of 9.7 miles of new ROW (Appendix C).

Similar to the Proposed Project, the alignment would proceed north from the Rector substation within existing SCE ROW. At Structure #7, where the Proposed Project would turn east, Alternative 3 would continue north in the existing ROW. The alignment would then proceed north from Rector Substation for approximately 14.6 miles within the existing SCE ROW. At mile 14.6 (approximately 400 feet south of the Friant-Kern Canal), the alignment would turn east on Stokes Mountain, leaving the existing SCE ROW. The alignment would then cross Stokes Mountain for approximately three miles and then descend from the Stokes Mountain ridgeline (one mile) and turn northeast to parallel the Stokes Mountain/Stone Corral Canyon interface for approximately four miles. The alternative would then cross Boyd Drive and continue in the same northeasterly direction to crest the Goldstein Peak ridgeline at mile 23. The alignment would then descend into the Rattlesnake Creek Valley until it reached the existing Big Creek 3-Springville 220 kV transmission line at a point approximately 40 miles south of Big Creek Powerhouse No. 3.

Temporary disturbance for structure work areas would be the same under this alternative as for the Proposed Project on a per-pole/tower basis, but Alternative 3 would use more lattice towers which have different foundation requirements than poles. The total number of work areas for pole/tower installation and removal would be higher under this alternative as there would be approximately 79 additional new structures compared to the Proposed Project, for a total of 142 tubular steel poles and 57 steel lattice towers. Similar to the Proposed Project, the majority of work areas would be located within the ROW (either existing or acquired). Work areas (i.e., stringing, tensioning, and pulling sites) would be required outside of the ROW at structures #74, #81, #93, and #128 of this alternative (see Appendix C, Section 2, *Alternative 3 Road Story*). Table 3-6 and Table 3-7 summarize project metrics and access road requirements for Alternative 3, respectively.

**TABLE 3-6
SUMMARY OF TYPICAL POLE INSTALLATION METRICS FOR ALTERNATIVE 3**

	Single Circuit Lattice Tower	Double Circuit Lattice Tower	Double Circuit Tubular Pole	Single Phase Tap Pole
Poles/Towers Removed	242	0	0	0
Poles/Towers Installed	0	57	142	0
Height	63 feet (AGS)	120 to 160 feet (AGS)	120 to 160 feet (AGS)	80 to 160 feet (AGS)
Construction set up area at each structure	NA	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)
Number of foundations required	NA	4	1	1
Excavation diameter (feet)	NA	3 to 6	6 to 10	6 to 10
Excavation depth (feet)	NA	15 to 30	20 to 60	20 to 60

SOURCE: SCE, 2008

**TABLE 3-7
SUMMARY OF ACCESS ROAD REQUIREMENTS FOR ALTERNATIVE 3**

Type of Road	Description	Miles	Acreage ^a
New Permanent Access roads	Would be 20 feet wide, with 16 feet of road and two feet of berms on each side. No other preparation required although crushed rock may need to be applied in very limited areas for traction.	18.5	44.84 acres
Existing Access and Spur Roads	Various types of access and spur roads to be used including paved roads and dirt ranch roads	15.8	Unknown as road widths vary

^a Based on typical road width of 20 feet.

SOURCE: This table represents an approximation based upon information for Alternative 3 provided by the project applicant.

Vegetation clearance and disturbance requirements would be similar to the Proposed Project but the acreages involved would be different. The requirements for Alternative 3 are shown below:

- Temporary disturbance area (i.e., vegetation clearing and grading to be restored following completion of construction): 161 acres.
- Permanent disturbance area (i.e., access roads and 50-foot clearance areas surrounding structures): 71 acres.

Implementation of this alternative would include similar construction, operation and maintenance activities to those described for the Proposed Project except that Alternative 3 would take approximately 24 months assuming there are no outage constraints. Table 3-8 below summarizes the length of time estimated to construct each phase of Alternative 3. This alternative would be 5.8 miles longer and involves replacement of existing structures on 13.5 more miles than the Proposed Project. The terrain for Alternative 3 is more rugged requiring the construction of more miles of access roads than the Proposed Project.

**TABLE 3-8
CONSTRUCTION TIMETABLE FOR ALTERNATIVE 3**

Alternative 3 Construction Activity	Duration (months)
Material Staging Yard preparation	Less than 1
Demolition of 14.6 miles of existing Big Creek 3 – Rector 220 kV transmission facilities	5
Construction of 14.6 miles of new Big Creek 1-Rector and Big Creek 3 – Rector 220 kV double circuit transmission line	8
Demolition of 14.6 miles of existing Big Creek 1-Rector 220 transmission facilities	5
Construction of 14.6 miles of new Cross Valley 220kV Double Circuit Transmission Line within the Big-Creek Rector Corridor	8
Construction of 9.7 miles of new Cross Valley 220kV Double Circuit Transmission Line across the San Joaquin Valley	9
Construction of new Cross Valley 220kV Double Circuit Transmission Line tap into Big Creek-Springville Corridor	1
Post construction clean-up and restoration	2

SOURCE: SCE, 2009

Rationale for Full Analysis

Project Objectives

This alternative would meet both basic project objectives.

Feasibility

This alternative would meet all legal, regulatory, and technical feasibility criteria. Additional ROW easements would have to be negotiated with property owners to gain easements for the new

ROW. However, SCE can choose to pursue legal condemnation should negotiations fail to result in equitable agreements.

Lessen Significant Environmental Impacts

Similar to the Proposed Project, Alternative 3 would result in significant unmitigable impacts to agricultural and cultural resources. This alternative would result in the permanent removal of fewer acres of Farmland than the Proposed Project and would also permanently remove fewer acres of walnut orchards from production. Impacts on cultural resources would be generally similar as under the Proposed Project.

Potential New Impacts Created

Alternative 3 would result in significant unmitigable impacts on northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve as well as on jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands.

3.4.3 Alternative 6

Description

Alternative 6 includes a transmission line loop following a different alignment than the Proposed Project. Modifications to the Rector, Springville, Vestal, and Big Creek 3 substations would be the same as under the Proposed Project. The Alternative 6 alignment would be approximately 20.5 miles long, would use 8.1 miles of existing ROW and would require the acquisition of 12.4 miles of new ROW (Appendix C).

Similar to the Proposed Project, this alternative would begin at the Rector Substation and head north for approximately 8.1 miles within existing SCE ROW. At mile 8.1 the alignment would head east, paralleling a road located approximately one-half mile north of Avenue 344 for approximately 6.9 miles. The majority of the road is private; however, a small portion on the eastern side of the alignment parallels Avenue 348. At mile 15, the alignment would then turn and head north for approximately two miles. At mile 17 the alignment would head east and then northeast for approximately 0.3 miles where it would begin to follow the same alignment as Alternative 2 for approximately 3.2 miles until it reached the existing Big-Creek 3-Springville 220 kV transmission line at a point approximately 52 miles south of Big Creek Powerhouse No. 3 (Appendix C).

Since Alternative 6 was developed by the EIR preparers, detailed construction metrics have not been developed by SCE. As described above, the first 8.1 miles and final 3.2 miles of Alternative 6 would follow the same routing as Alternative 2; therefore, detailed construction metrics such as the number of replacement structures and new structures required for these portions of Alternative 6 were derived from SCE data developed for Alternative 2. For the remaining 9.2 miles of the Alternative 6 alignment that have not been developed by SCE, metrics were scaled based on information provided in the PEA for the SCE-developed alternatives. It should be noted that the construction metrics provided for Alternative 6 would be subject to change based on final design

and engineering that would be developed for the alternative prior to commencement of construction activities. Table 3-9 below shows scaled construction metrics for Alternative 6.

**TABLE 3-9
SUMMARY OF CONSTRUCTION ASSUMPTIONS FOR ALTERNATIVE 6**

	Existing SCE ROW ^a	New ROW		Total
		Developed by EIR Team ^b	Developed by SCE ^a	
Distance	8.1 miles	9.2 miles	3.2 miles	20.5 miles
Structures Removed	138	0	0	138
Double Circuit Lattice Towers Constructed	4	3	3	10
Double Circuit Tubular Poles	78	54	13	145

^a Based on data developed by SCE for Alternative 2.

^b Based on assumptions derived from the PEA.

Temporary disturbance for structure work areas would be the same under this alternative as for the Proposed Project on a per-pole/tower basis. The total number of work areas for pole/tower installation and removal would be higher under this alternative as there would be approximately 112 additional structures removed (138 in total) and 35 additional structures installed (43 additional tubular steel poles, two fewer lattice steel towers, and six fewer single phase tap poles) compared to the total under the Proposed Project. Similar to the Proposed Project, the majority of work areas would be located within the ROW (either existing or acquired). Table 3-10 summarizes assumed construction metrics for Alternative 6.

**TABLE 3-10
SUMMARY OF TYPICAL POLE INSTALLATION METRICS FOR ALTERNATIVE 6^a**

	Single Circuit Lattice Tower	Double Circuit Lattice Tower	Double Circuit Tubular Pole	Single Phase Tap Pole
Poles/Towers Removed	138	0	0	0
Poles/Towers Installed	0	10	145	0
Height	63 feet (AGS)	120 to 160 feet (AGS)	120 to 160 feet (AGS)	80 to 160 feet (AGS)
Construction set up area at each structure	NA	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)	100 x 100 foot (min) 200 x 200 ft (max)
Number of foundations required	NA	4	1	1
Excavation diameter (feet)	NA	3 to 6	6 to 10	6 to 10
Excavation depth (feet)	NA	15 to 30	20 to 60	20 to 60

^a This table represents an approximation based upon information for Alternative 2 provided by the project applicant and information provided in the PEA.

The first 8.1 miles of Alternative 6 would be accessible via existing roads; however, a number of small spur roads would need to be graded to facilitate access to each individual pole. The majority of the 9.2 mile portion of Alternative 6 that has not been developed by SCE would be accessible via existing private roads. Most of these roads would need to be widened to meet SCE's 20 foot requirement. Alternatively, spur roads could be developed from existing public roadways that run perpendicular to the Alternative 6 alignment. In areas where poles are located in close proximity to existing roadways, this could help reduce the amount of land impacted from grading of new access roads. The final 3.2 miles of the alternative would utilize the same existing and proposed access roads as those developed by SCE for Alternative 2.

Vegetation clearance and disturbance requirements would be similar to the Proposed Project but the acreages involved would be different. Temporary land disturbance from tower/pole installation and removal and stringing activities were estimated based on data provided in the PEA. Land disturbance from access road grading were estimated assuming that new access road would be 20 feet wide and that existing access roads in CPUC developed ROW would be widened by eight feet to achieve SCE's 20-foot requirement. The estimated requirements for Alternative 6 are shown below in Table 3-11:

- Temporary disturbance area (i.e., vegetation clearing and grading to be restored following completion of construction): 97 acres.
- Permanent disturbance area (i.e., access roads and 50-foot clearance areas surrounding structures): 45 acres.

**TABLE 3-11
CONSTRUCTION TIMETABLE FOR ALTERNATIVE 6**

Alternative 6 Construction Activity	Duration (months)
Material Staging Yard preparation	Less than 1
Demolition of 8.1 miles of existing Big Creek 3 – Rector 220 kV transmission facilities	3
Construction of 8.1 miles of new Big Creek 1-Rector and Big Creek 3 – Rector 220 kV double circuit transmission line	5
Demolition of 8.1 miles of existing Big Creek 1-Rector 220 transmission facilities	3
Construction of 8.1 miles of new Cross Valley 220kV Double Circuit Transmission Line within the Big-Creek Rector Corridor	5
Construction of 12.4 miles of new Cross Valley 220kV Double Circuit Transmission Line across the San Joaquin Valley	7
Construction of new Cross Valley 220kV Double Circuit Transmission Line tap into Big Creek-Springville Corridor	1
Post construction clean-up and restoration	2

SOURCE: SCE, 2009

Rationale for Full Analysis

Project Objectives

This alternative would meet both basic project objectives.

Feasibility

This alternative would meet all legal, regulatory, and technical feasibility criteria. Additional ROW easements would need to be negotiated with property owners to gain easements for the new ROW. However, SCE can choose to pursue legal condemnation should negotiations fail to result in equitable agreements.

Lessen Significant Environmental Impacts

Similar to the Proposed Project, Alternative 6 would result in significant unmitigable impacts to agricultural and cultural resources. This alternative would result in the permanent removal of fewer acres of Farmland than the Proposed Project and would also permanently remove fewer acres of walnut orchards from production. Impacts on cultural resources would be generally similar as under the Proposed Project.

Potential New Impacts Created

Alternative 6 would result in impacts to additional sensitive biological resources (i.e., Critical Habitat) and although potential impacts would be mitigated to less than significant, impacts would be greater than under the Proposed Project.

3.4.4 No Project Alternative

CEQA requires an evaluation of the No Project Alternative in order that decision makers can compare the impacts of approving the project with the impacts of not approving the project. According to CEQA Guidelines (Section 15126.6[e]), the No Project Alternative must include:

- (a) the assumption that conditions at the time of the Notice of Preparation (i.e., baseline environmental conditions) would not be changed since the Proposed Project would not be installed, and
- (b) the events or actions that would be reasonably expected to occur in the foreseeable future if the project were not approved. The first condition is described in the EIR for each environmental discipline as the “environmental baseline,” since no impacts of the Proposed Project would be created. This section defines the second condition of reasonably foreseeable actions or events. The impacts of these actions are evaluated in each issue area’s analysis in Chapter 4.

Under the No Project alternative, the Proposed Project would not be implemented. The San Joaquin Cross Valley Loop would not be created and the modifications to the four substations would not occur. None of the project objectives would be met and demand in the Electrical Needs Area would not be adequately met. The unequal distribution of load would continue to result in overloads on the 220 kV lines serving Rector Substation from the Big Creek

Hydroelectric Project. This condition would continue to jeopardize SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area.

3.5 Alternatives Eliminated from Full EIR Evaluation

As discussed in Section 3.1, alternatives were assessed for their ability to reasonably achieve both basic project objectives and reduce the significant environmental impacts of the Proposed Project. Also, their technical, legal, and regulatory feasibility was evaluated. Based on these screening criteria, the alternatives eliminated from EIR consideration are listed above in Section 3.3.2. The rationale for elimination of each alternative is presented below.

3.5.1 Alternative 4 – Alignment Variation

Description

This alternative (called Alternative 4 in the SCE Application and PEA) would create a cross valley loop using an alignment located south of the Proposed Project alignment. Alternative 4 would be approximately 18.8 miles long and would require the acquisition of new ROW for its entire length. Approximately 15 miles would traverse through an area primarily developed for agriculture. Approximately four miles would be located within the Yokohl Valley area of the foothills to the Sierra Nevada.

Beginning at Rector Substation, the alignment would proceed west for approximately one-half mile and then south for 2.3 miles. At mile 2.8, the alignment would turn east for 2.8 miles. From mile 5.6 to mile 9.6 the alignment would turn southeast to Avenue 264 and then travels east, paralleling the north side of Avenue 264. From mile 9.6 to mile 11.8, the alignment would travel north paralleling Road 216, and then northeast paralleling Myer Road. From mile 12.7 to mile 14.7 the alignment would travel east across farmland until Yokohl Drive. The alignment would then turn parallel to Yokohl Drive and the base of Monument Hill to the existing Big Creek 3-Springville 220 kV transmission line at a point approximately 65 miles south of Big Creek Powerhouse No. 3.

Construction, operation and maintenance activities associated with this alternative would be similar to the Proposed Project.

Rationale for Elimination

A supplemental alignment sensitivity analysis was conducted by SCE and independently reviewed by the EIR team to assess the reliability of various alignment alternatives (Appendix D). The analysis of anticipated power flow implications for Alternative 4 identified reliability criteria violations associated with voltage drops under N-1 line outage conditions. This violation would occur for alignments terminating approximately 65 miles or more south of the Big Creek Powerhouse 3. The voltage drops would exceed the allowable voltage drops identified in SCE's Transmission Guidelines. As a result, this alternative fails to meet the basic technical objective of

improving power flow capabilities in the system. Therefore Alternative 4 was eliminated from further consideration.

3.5.2 Alternative 5 – Alignment Variation

Description

This alternative, developed by the EIR team, would tie into the Big Creek 3-Springville 220 kV transmission line at the same location as the Proposed Project to create a cross valley loop. Alternative 5 would be approximately 18.3 miles long and would require acquisition of 15.4 miles of new ROW.

Alternative 5 would begin at Rector Substation and head north for approximately 2.9 miles within existing SCE ROW. At mile 2.9 the alignment would head east for approximately 0.4 miles until it reached State Route (SR) 216. The alignment would then head north east, running parallel to SR 216 for approximately 0.6 miles. From here the alignment would head generally east for approximately 3.6 miles, heading north in a few locations to maximize the use of existing local roads. At mile 7.5 the alignment would head north for approximately 0.3 miles until it reached Avenue 312 where it would turn and head generally east for approximately 4.2 miles, making a few turns towards the north along the way. At mile 12, the alignment would meet up with mile 12.2 of the Proposed Project. From here the alignment would follow the Proposed Project alignment for 6.3 miles where it would terminate at the existing Big Creek 3-Springville 220 kV transmission line at a point 58 miles south of Big Creek 3 Powerhouse No. 3.

Rationale for Elimination

Alternative 5 would not lessen significant environmental impacts compared to the Proposed Project. The transmission line alignment would have similar to or greater impacts on agricultural resources, specifically walnut orchards.

3.5.3 Reconductoring Existing Transmission Lines

Description

In an attempt to avoid the development of new ROW, alternatives for reconductoring existing transmission facilities were considered. Given the current line and ROW configuration in the Big Creek to Magunden corridor, the following three options were considered:

- Reconductor both of the Magunden to Rector 220 kV circuits (158 circuit miles),
- Reconductor both of the Rector to Big Creek 220 kV circuits (136 circuit miles), and
- Reconductor both Magunden to Rector 220 kV circuits and Rector to Big Creek 220 kV circuits (294 circuit miles).

In each of these options the existing tower structures would be preserved and new, larger capacity conductor would be used in place of the existing wires. These larger conductors would be capable

of transmitting greater amounts of power, thus helping to eliminate thermal overloading during normal peak and various system contingencies.

Rationale for Elimination

The structural characteristics of the existing towers limit the conductor weight as well as the maximum wind and ice loading that may be safely applied. Therefore, the size of the new conductors that could be safely installed is limited. Tower heights, line tension and physical properties of the conductor materials also impact the sag characteristics of the conductor. These factors limit the addition of new transmission capacity through reconductoring.

Because the system must be designed to withstand the outage of any one line or two lines, reconductoring the lines within either the Magunden to Rector or the Rector to Big Creek corridors would not result in a system that would meet applicable reliability criteria. Therefore, both corridors from Magunden and Big Creek to Rector would need to be reconducted thereby eliminating the first two reconductoring options described above.

Under the third option, all of the existing 220 kV transmission circuits from Magunden to Rector to Big Creek would be replaced with a high temperature low sag conductor of similar weight but having the ability to transmit larger amounts of power. This would be problematic due to the short window available in which the reconductoring work could be carried out. The period from the beginning of October to the end of March, a six month period, would be the only time that does not overlap with either spring runoff conditions for the Big Creek Hydroelectric plants or the summer peak load conditions. During this period the system must remain intact. Construction of this alternative would take two or more construction seasons making the permitted window infeasible. As a result, construction of this alternative would take a minimum of four seasons to complete.

All three of the reconductoring options would fail to improve system strength. The analysis in Appendix D shows that all three of the reconductoring options result in the same system stability problems as the existing system. Therefore, this alternative fails to meet one of the two basic project objectives and was eliminated from further analysis.

3.5.4 Rebuild Existing Transmission Lines

Description

As an alternative to reconductoring existing transmission facilities between Big Creek and Magunden, the possibilities of rebuilding existing transmission facilities was explored in an attempt to avoid the development of new ROW. Given the current line and ROW configuration the following three options were explored:

- Rebuild both of the Magunden to Rector 220 kV circuits
- Rebuild both of the Rector to Big Creek 220 kV circuits
- Rebuild both Magunden to Rector 220 kV circuits and Rector to Big Creek 220 kV circuits.

In each of these options the existing tower structures (two for each line segment) would be removed and replaced with one double circuit tower supporting bundled conductor. These new and larger conductors would replace the existing wires. The larger conductors would be capable of transmitting greater amounts of power, thereby helping to eliminate overloading during normal peak and various system contingencies. The structural characteristics of the existing towers would no longer limit the size or number of conductors placed on the structures.

Rationale for Elimination

Similar to the reconductoring alternative described previously, the first two options presented above would not meet the reliability criteria. Additionally, the rebuilt system could be more susceptible to failure from the loss of a single tower because the system would use double circuit towers as opposed to the existing single circuit towers. Therefore, both corridors from Magunden and Big Creek to Rector would need to be rebuilt thereby eliminating the first two rebuild options described above.

Under the third option, all of the existing 220 kV transmission circuits and towers from Magunden to Rector to Big Creek would be rebuilt. Although this would help relieve the thermal overload problems, instability under a scenario where two lines are out of service could not be mitigated. In addition, the construction time required due to limitations on construction period as described for the reconductoring alternative above would be prohibitive. Construction would take a minimum of four seasons and likely longer. Further, as described in Appendix D, under base-case SCD analysis this alternative would meet the basic technical objective of improving system strength, but under line outage scenarios (in particular N-2), the rebuild alternative would fail to improve system strength. Because this alternative would not meet one of the two basic project objectives it was eliminated from further consideration.

3.5.5 System Alternative – New 220 kV Transmission Line Magunden-Rector-Big Creek 3 (or Big Creek 1)

Description

This alternative would add a new 220 kV transmission line from Magunden, connecting to Rector and Big Creek. While a specific alignment for this new line was not identified it was assumed the existing corridor would be widened as necessary. The transmission line would consist of a double circuit 220 kV line, with one set of bundled conductors initially being installed. The double circuit pole configuration would allow for future use of the ROW. This alternative would require the development of new ROW for up to 135 miles.

Rationale for Elimination

This alternative is technically feasible but would take longer to complete due to the need to acquire substantially more new ROW and permits for State and federal lands. Additionally, the potential loss of a section of corridor containing all three lines would require the implementation of involuntary load shedding. This could occur as the result of a fire in the ROW requiring the

simultaneous shutdown of all three lines either north or south of Rector. As a result, this alternative would result in a system that would be less reliable than the Proposed Project. Therefore, this alternative was eliminated from consideration.

3.5.6 System Alternative – Loop Springville-Magunden Line into Vestal Substation

Description

This alternative would loop the existing Magunden-Springville 220 kV line into the Vestal Substation (approximately 13 miles) and either (a) build a third 220 kV line between Vestal and Rector substations (approximately 33 miles) or (b) reconstruct/reconductor the existing Vestal-Rector 220 kV lines. Option (a) would result in the addition of a fifth 220 kV line feeding the Rector Substation.

Rationale for Elimination

This alternative would be similar in scope to the Proposed Project but fails to add new transmission capacity at Rector Substation. Additionally, the alternative would require substantial reconductoring, which would encounter the same construction window issues described under the reconductoring alternative above. Due to the limited system improvements and lack of a reduction in environmental impacts, this alternative was eliminated from consideration.

3.5.7 Non-Wires Alternative – Demand Management Conservation

Description

Demand Management Conservation programs are designed to reduce customer energy consumptions. CPUC regulatory requirements dictate that supply-side and demand-side resource options should be considered on an equal basis in a utility's plan to acquire lowest cost resources. These programs are designed to either reduce the overall use of energy or to shift the consumption of energy to off-peak times.

SCE offers a number of energy efficiency programs in California, under the umbrella of its Rebate and Savings program. The specific programs are divided into residential, business, builders and buyers, and energy management assistance programs.

Rationale for Elimination

Reductions in demand through energy conservation programs are part of SCE's future operations and are incorporated into its long-term peak load forecasts. However, as separate and stand alone programs, these programs do not provide either the capacity or reliability needs of SCE, as stated in the objectives for the Proposed Project. For these reasons, this alternative was eliminated from further consideration.

3.5.8 Non-Wires Alternative – Renewable or Conventional/ Distributed Generation Energy Resources

Description

Renewable

Executive Order #S-14-08 sets California's renewable energy goals at 33 percent by 2020. This requires all retail sellers of electricity to increase their procurement of eligible renewable resources to 33 percent by 2020. This is an increase from California's Renewable Portfolio Standard (RPS) that required retail sellers of electricity to increase their procurement of eligible renewable to 20 percent by 2017. The RPS Program was mandated by Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002) under Public Utilities Code sections 381, 383.5, 399.11 through 399.15, and 445. The CPUC, in collaboration with the California Energy Commission (CEC), is addressing its responsibilities in implementing the RPS through its own proceedings. On April 22, 2004 the CPUC issued an Order Instituting Rulemaking to specifically address the RPS (R.04-04-026). On March 8, 2003, the CEC and the CPUC approved an Energy Action Plan in addition to the Renewable Portfolio Standard. On September 21, 2005, the Energy Action Plan II was finalized. The shared goal of the Energy Action Plan is to:

“Ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies, including prudent reserves, are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.”

In January 2006, the CPUC created the California Solar Initiative (CPUC ruling R.04-03-017) which moves the consumer renewable energy rebate program for existing homes from the CEC to the utility companies under the direction of the CPUC.

The CEC manages \$350 million targeted for new residential building construction. It will use funds already allocated to the CEC to foster renewable projects between 2007 and 2011. Called the New Solar Homes Partnership, it will focus on new residential construction.

Most of California's developed geothermal resources are located in Sonoma, Lake, Imperial, and Inyo Counties. Other geothermal resource areas in the State are found in Lassen, Mono, Siskiyou, and Modoc Counties. Some of the sites for new geothermal development are located in areas characterized by sensitive cultural and environmental concerns. Other issues that could delay development include permitting and access to transmission. The technologies most often used to produce electricity from geothermal resources in California are flash steam power and binary cycle power plants. The flash steam power technology is typically used at sites that have high temperature fluids (usually above 400 degrees Fahrenheit). Fluids at these sites boil into steam as they rise to the surface. The steam is used to power a turbine, which turns a generator to produce electricity. Binary cycle power plants can be used with lower temperature geothermal resources where the water does not become steam before rising to the surface.

At present, there are over 16,000 wind turbines in the U.S., with most of them located in California. In total, approximately 1,800 megawatts (MW) of electricity is generated from 105 separate wind farms. According to the Renewable Resources Development Report (CEC, 2003), Tulare County has a low potential for wind generation capacity. Even in high capacity areas, wind energy technology requires approximately five to six acres per megawatt of wind power. In addition, the primary technical obstacle to utilizing wind generation is the lack of existing transmission infrastructure to transport the wind-generated power to the grid.

Currently there are two types of solar generation available: solar thermal power (also known as concentrating solar power) and photovoltaic (PV) power generation. At present, California generates approximately 345MW of power with solar thermal power plants, with the majority of these facilities being parabolic-trough electric plants installed in the Mojave Desert, due to the large tracks of land required for this technology. PV power systems are available on a significantly smaller scale, and have received increased support from private and public sections since the 1970s. PV systems typically convert about 10 percent of the available solar energy to alternating current electricity, and require approximately one square kilometer (247 acres) for a 100MW rated power system.

Distributed Generation

Distributed generation is electricity production that is on-site or close to the load center that could be interconnected at distribution, sub-transmission, or transmission system voltages. Distributed generation is generally limited to systems less than 20 MW. Distributed generation does not include hydroelectricity, geothermal, non-combined heat and power related digester gas, landfill gas, and municipal solid waste.

In March 2007 the California Energy Commission released the staff report *Distributed Generation and Cogeneration Policy Roadmap for California* (CEC, 2007). The report included a vision for Distributed Generation and Cogeneration of being significant components of California's electrical system, meeting over 25 percent of the total peak demand. To achieve its vision, California will support incentives in the near term, transition to new market mechanisms, and reduce remaining institutional barriers.

Rationale for Elimination

Renewable resources for renewable energy programs are part of SCE's future operations and are incorporated into its long-term peak load forecasts. As separate and stand-alone programs, these renewable resource alternatives would not replace the need for upgrading the existing transmission infrastructure in the study area. Indeed, transmission system constraints are noted by the CEC as a substantial impediment to effective integration of renewable resources statewide. However, because renewable resources would not provide either the capacity or reliability needs of SCE, as stated in the objectives for the Proposed Project, and transmission infrastructure upgrades would still be required to integrate any renewable resources, this alternative was eliminated from further consideration.

The distributed generation industry is still a nascent industry that survives despite some difficult market conditions. There are numerous institutional, industry and market barriers that have impeded the growth and adoption of the industry to date. Although the potential is recognized, it is not currently a significant energy resource. The current distributed generation penetration is 2.5 percent of total peak demand in California (CEC, 2007). Because distributed generation would not provide either the capacity or reliability needs of SCE, as stated in the objectives for the Proposed Project, and transmission infrastructure upgrades would still be required to integrate distributed generation, this alternative has been eliminated from further consideration.

3.6 Cumulative Projects

As required by CEQA (Section 15130 et seq. of the CEQA Guidelines), this EIR includes an analysis of “cumulative impacts.” CEQA defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative analysis is intended to describe the “incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable probable future projects” and can result from “individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines, Section 15355).

Consistent with the CEQA requirements (Section 15355), a cumulative scenario has been developed to identify projects analysis that could potentially contribute to cumulative impacts for the Proposed Project. The projects that comprise the cumulative scenario do not include existing projects that completed and in operation, as those are included as part of the environmental setting for individual resource areas and are analyzed with respect to each resource area in Chapter 4. The cumulative scenario is comprised of projects that are within the defined study area for the Proposed Project and alternatives, and include:

- Projects that are currently under construction;
- Approved projects that have not yet been constructed;
- Projects requiring an agency approval for an application that has been received at the time the Notice of Preparation was released;
- Projects that have been budgeted, planned, or included as a later phase of a previously approved project;
- Probable future projects that are determined to be reasonably foreseeable for other reasons.

The projects considered to be part of the cumulative scenario are presented in Table 3-12, which also describes the approximate geographic location of each project (Figure 3-2). The projects in the cumulative scenario include a range of project types from small single-family housing developments and road improvements to one industrial project.

**TABLE 3-12
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT**

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
1	SR 65 Widening	Road Widening	Along SR 65 from Hermosa Avenue to SR 198.	Caltrans	Widen SR 65 to a four-lane expressway from Hermosa Avenue to SR 198.	In project approval and environmental documentation phase. Construction estimated to start in 2013.	Intersects with Proposed Project.
2	SR 65 Resurfacing	Road Resurfacing	Along SR 65 from Avenue 236 to SR 198.	Caltrans	Provide resurface asphalt-concrete (AC) overlay.	In project approval and environmental documentation phase. Construction estimated to start in 2012.	Intersects with Proposed Project.
3	SR 245 Resurfacing and Widening	Road Resurfacing	Along SR 245 to SR 201.	Caltrans	Provide resurface AC overlay. Widen SR 245 up to 55 feet from centerline.	AC overlay in project approval and environmental documentation phase. Construction estimated to start in 2011. Widening based on Caltrans projected ROW requirements, and would not be expected to occur until 2030.	Intersects with Alternative 2 and 6.
4	State Highway 198 / Road 148 Grade-Separated Interchange	Freeway interchange	Located at Highway 198 and currently un-constructed Road 148.	City of Visalia and Caltrans	Planned freeway interchange between Highway 198 and the currently un-constructed Road 148.	Called out in the City's Circulation Element. Construction would be a collaborative effort between City of Visalia and Caltrans and is not scheduled until 2023 or later.	Intersects with Alternatives 2 and 3.
5	River Run Ranch Units 5-7 Vesting Tentative Subdivision Map	Phased Subdivision	Located on Visalia Parkway, between St. Johns Parkway and Houston Avenue.	City of Visalia	Phased subdivision approved for the construction of 158 single-family residences.	Tentative map approved on August 16, 2006; improvement plans for the first phase are currently under review. Construction has not commenced but build-out is expected in the next one to 10 years.	Directly adjacent to Alternatives 2, 3 and 6.
6	Willow Creek #2 Multifamily Residential Development	Multifamily Residential Development	Located west of existing Big-Creek Rector lines on the north side of Mineral King Avenue.	City of Visalia	Planned development approved for construction of duplex and triplex residences (27 total dwelling units).	Development approved on August 25, 2008. Construction has not commenced, however build-out is expected in the next one to five years.	Directly adjacent to Alternatives 2, 3 and 6.

TABLE 3-12 (Continued)
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
7	South Point Villas	Residential Subdivision	Located on the northwest corner of Caldwell Avenue and Pinkham Street.	City of Visalia	Subdivision of 5.2 acres into 18-multifamily lots and 5.9 acres into 15 single family lots.	Tentative map approved on August 13, 2007.	Approximately 1.5 miles west-southwest of Rector Substation.
8	Willow Springs	Residential Subdivision	Located on the south side of Walnut Avenue, east of Santa Fe Street.	City of Visalia	Subdivision of 45 acres into 167 single family lots.	Tentative map approved on July 25, 2005.	Approximately 2.25 miles west of the Proposed Project and Alternatives 2, 3 and 6.
9	DeeLynna Ranch	Residential Subdivision	Located on the east side of McAuliff Street, south of Noble Avenue.	City of Visalia	Subdivision of 14.7 acres into 77 single family lots and open space and landscaping lots.	Tentative map approved on July 25, 2005.	Approximately 0.5 miles west of Alternatives 2, 3 and 6.
10	Eagle Meadows of Visalia No. 2	Residential Subdivision	Located on the north side of Goshen Avenue approximately 500 feet west of Lovers Lane.	City of Visalia	Subdivision of 21.5 acres into 86 single family lots.	Tentative map approved on October 10, 2005.	Approximately 1.25 miles west of Alternatives 2, 3 and 6.
11	Eagle Meadows of Visalia No. 1	Residential Subdivision	Located on the north side of Goshen Avenue approximately 1,500 feet west of Lovers Lane.	City of Visalia	Subdivision of 19.6 acres into 65 single family lots.	Tentative map approved on October 10, 2005.	Approximately 1.25 miles west of Alternatives 2, 3 and 6.
12	Woodside Sousa Property	Residential Subdivision	Located on the south side of Walnut Avenue, east of McAuliff Street.	City of Visalia	Subdivision of 53 acres into 256 single family lots.	Final map for Phase 1 (129 lots) was recorded and some building permits have been issued. 127 lots are still tentative.	Approximately 1,500 feet west of the Proposed Project and Alternatives 2, 3 and 6.
13	Quail River	Vesting Residential Subdivision	Located on Walnut Avenue between Lovers Lane and Road 148.	City of Visalia	Subdivision of 67.32 acres into 323 single family lots and 1 multifamily lot.	Final map has been recorded but no building permits have been issued to date.	Approximately 0.5 miles west of the Proposed Project and Alternatives 2, 3 and 6.
14	Rivers Edge Unit No. 3	Vesting Residential Subdivision	Located on the corner of Goddard Street and Houston Avenue.	City of Visalia	Subdivision of 5.33 acres into 20 single family lots and 3 multifamily lots.	Tentative map approved on January 23, 2006.	Approximately 1.25 miles west of Alternatives 2, 3 and 6.

**TABLE 3-12 (Continued)
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT**

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
15	Lance Lane Estates	Residential Subdivision	Located on the south side of Houston Avenue at Goddard Street.	City of Visalia	Subdivision of 19.7 acres into 84 single family lots.	Tentative map approved on October 10, 2005.	Approximately 1.25 miles west of Alternatives 2, 3 and 6.
16	Riverbend Estates	Residential Subdivision	Located on the south side of Goshen Avenue between Cain Street and Lovers Lane.	City of Visalia	Subdivision of 25.3 acres into 111 single family lots.	Tentative map approved on October 10, 2005.	Approximately 1.5 miles west of Alternatives 2, 3 and 6.
17	Maddox at Caldwell VI	Residential Subdivision	Located north and south of Monte Verde Avenue between Ben Maddox Way and Burke Street.	City of Visalia	Subdivision of 29.29 acres into 148 single family lots.	Tentative map approved on August 14, 2006.	Approximately 1.75 miles west of the Rector Substation.
18	St. Charles Park	Residential Subdivision	Located on the south side of Houston Avenue, approximately 1,700 feet west of Lovers Lane.	City of Visalia	Subdivision of 9.58 acres into 17 single family lots.	Tentative map approved on March 13, 2006.	Approximately 1.25 miles west of Alternatives 2, 3 and 6.
19	Graystone	Residential Subdivision	Located on the south side of K Road, approximately 1,250 feet east of Pinkham Road.	City of Visalia	Subdivision of 5.25 acres into 18 single family lots.	Tentative map approved on January 23, 2006.	Approximately 1.1 miles west of the Rector Substation.
20	Teakwood Estates	Residential Subdivision	3504 E. Douglas Avenue	City of Visalia	Subdivision of 5 acres into 23 single family residential lots.	Tentative map approved on September 25, 2006.	Approximately 0.5 miles west of Alternatives 2, 3 and 6.
21	Stonecrest Estates	Residential Subdivision	Located on the southeast corner of Pinkham Street and Laura Avenue.	City of Visalia	Subdivision of 7 acres into 43 residential lots.	Tentative map submitted for review on August 8, 2006.	Approximately 1.35 miles west of the Proposed Project and Alternatives 2, 3 and 6.
22	Mineral King Business Park	Subdivision	3240 E. Mineral King Avenue.	City of Visalia	Subdivision of 0.9 acres into 5 lots with one common lot.	Tentative map approved on February 12, 2007.	Approximately 0.75 miles west of Alternatives 2, 3 and 6.

TABLE 3-12 (Continued)
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
23	Maddox @ Caldwell VII	Residential Subdivision	Located at the southwest and southeast corners of Ben Maddox Way and K Avenue.	City of Visalia	Subdivision of 13.5 acres into 115 lots to allow 95 single-family detached units and 20 duplex structures yielding 40 multifamily attached units.	Tentative map approved on April 23, 2007.	Approximately 1.5 miles west of the Rector Substation.
24	St. John's Riverwalk	Residential Subdivision	Located at the northeast corner of the junction of St. Johns Parkway and Cain Street.	City of Visalia	Subdivision of 2.02 acres into 32 condominium lots.	Tentative map approved on July 9, 2007.	Approximately 1.75 miles west of Alternatives 2, 3 and 6.
25	Sequoia Heights No. 2	Residential Subdivision	Located south of Goshen Avenue, west of Oak Avenue and Irma Street in the Sequoia Heights Subdivision.	City of Visalia	Subdivision of 4.66 acres into 20 lots.	Tentative map submitted for review on June 25, 2007.	Approximately 1.3 miles west of Alternatives 2, 3 and 6.
26	Oak Park Estates	Residential Subdivision	Located on the northwest corner of Lovers Lane and Goshen Avenue.	City of Visalia	Subdivision of 11.25 acres into 57 single family lots.	Tentative map approved on September 24, 2007.	Approximately one mile west of Alternatives 2, 3 and 6.
27	Pinkham Ranch	Residential Subdivision	Located on the west side of Pinkham Street approximately 20 feet south of Laura Avenue.	City of Visalia	Subdivision of 4.33 acres into 18 single family lots.	Tentative map approved on March 24, 2008.	Approximately 1.5 miles west of the Proposed Project and Alternatives 2, 3 and 6.
28	La Dolce Villas	Residential Subdivision	1008 N. Lovers Lane	City of Visalia	Subdivision of a 40,668 square foot lot into 11 numbered lots and one letter lot for common ownership in the multi-family residential zone.	Tentative map approved on July 14, 2008.	Approximately one mile from Alternatives 2, 3 and 6.
29	Sierra Woods/ Phase IV	Single Family Residential	Located along Walnut Avenue, west of Farmersville Boulevard.	City of Farmersville	Phased housing development; current phase consists of 28 units.	Phase IV currently under construction.	Approximately 1,000 feet south of the Proposed Project.
30	Walnut Creek, All American	Single Family Residential	Located south of Walnut Avenue, west of Farmersville Boulevard.	City of Farmersville	Development of 6 single family residential units.	Currently under construction.	Approximately 0.75 miles south of the Proposed Project.

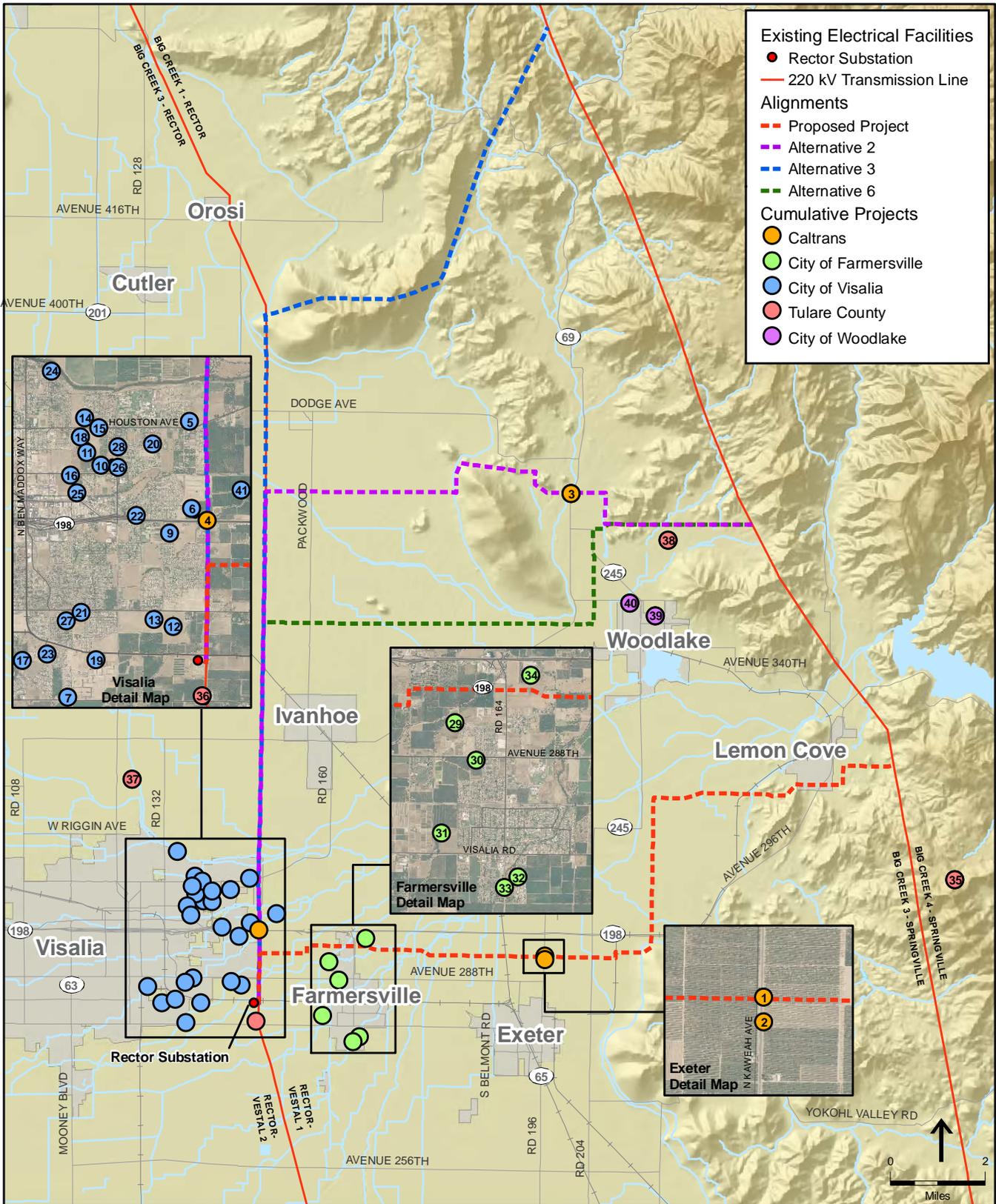
TABLE 3-12 (Continued)
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
31	Hacienda Place	Mixed Use Development	Located west of Farmersville Boulevard, north of Avenue 280.	City of Farmersville	Planned development that would include 121 single family homes, 8 mixed use loft apartments, a 2 acre park, and 5 acres of commercial development.	Currently under review.	Approximately 1.5 miles south of the Proposed Project.
32	Romero	Single Family Residential	Located east of Farmersville Boulevard, south of Avenue 280.	City of Farmersville	Development of 9 single family residential units.	Currently under construction.	Approximately two miles south of the Proposed Project.
33	Farmersville Senior Complex/Village Grove	Senior housing development	675 S. Farmersville Boulevard	City of Farmersville	Senior complex that would include 48 senior housing units.	Funding has been secured and Farmersville has issued will serve letters.	Approximately two miles south of the Proposed Project.
34	Highway 198 Corridor Specific Plan	Specific Plan	Bounded by State Highway 198 to the north, Terry Avenue to the south, Road 168 to the east and approximately one half mile west of Farmersville Boulevard.	City of Farmersville	Specific plan that would include development of industrial, commercial, and public facilities.	Specific Plan has been adopted and City of Farmersville has secured the land. The City is currently working on extending sewer lines to the Specific Plan Area.	Intersects with the Proposed Project.
35	Yokohl Ranch Project	Master Planned Community	Located 15 miles east of southeast Visalia.	Tulare County RMA	Master planned community that would include phased development of 10,000 residential units, approximately 550,000 square feet of mixed use commercial space, public/quasi-public areas, and infrastructure such as roads and utilities.	Notice of Preparation circulated on February 12, 2008.	Approximately three miles southeast of the Proposed Project.
36	Avenue 280 (Caldwell Avenue) Widening Project	Road Widening	Avenue 280 between SR 99 and Quince Avenue.	Tulare County RMA	Widen Avenue 280 (Caldwell Avenue) from a two-lane undivided road to a four/six-lane divided road with a median from the junction with SR 99 in Tulare County east to Mooney Boulevard in the City of Visalia and from Santa Fe Street in the City of Visalia to	Notice of Preparation of the Draft Environmental Impact Report circulated August 25, 2008.	Approximately 2,000 feet south of the Rector Substation.

TABLE 3-12 (Continued)
CUMULATIVE SCENARIO FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Map ID	APN(s) or Project Name	Description	Address / Location	Agency / Organization	Details	Status / Timeline	Distance from Proposed Project/Alternatives
					Quince Avenue in the City of Exeter, excluding the roadway segment through Farmersville.		
37	Tentative Subdivision Map 767	Residential Subdivision	Located 185 feet north of Avenue 320, approximately 1,500 feet east of Road 124.	Tulare County RMA	Subdivision of 14.7 acres into 55 residential lots and one ponding/drainage basin.	Tentative map approved by Tulare County in May 2006; valid through May 17, 2011 with extensions possible through 2015.	Approximately 2.5 miles west of Alternatives 2, 3 and 6.
38	Tentative Subdivision Map 805	Residential Subdivision	Located north of Avenue 360, west of Road 220.	Tulare County RMA	Subdivision of parcel 064-140-017 into 46 residential lots.	Tentative map hearing scheduled on December 17, 2008.	Approximately 1,500 feet south of Alternative 2 and 6.
39	Castle Rock Park	Residential Subdivision	Sierra Avenue and Wutchumna Avenue, Woodlake.	City of Woodlake	Subdivision of parcel 061-020-038 into 28 single-family lots.	Development approved September 11, 2006. Currently under construction.	Approximately 1.4 miles west of Alternative 6, and two miles south of Alternative 2.
40	Majestic Homes	Residential Subdivision	Between Cajon Avenue and Kaweah Avenue west of Acacia Avenue.	City of Woodlake	Subdivision of parcel 060-020-044 into 46 single-family lots.	Development approved May 30, 2007. Currently under construction.	Approximately 0.8 miles west of Alternative 6, and 1.5 miles south of Alternative 2.
41	Future Community Park	Community Park	Located north of SR 198, between Roads 148 and 152.	City of Visalia	100 acre community park.	Build-out date of 2012.	Adjacent to Alternative 2, 3 and 6, to the east of existing SCE ROW.
NA	APN: 120-070-07	Motel	Near Shaver Lake Point.	Fresno County	Request to rezone APN 120-070-07 and process a conditional use permit for a 50-cabin motel and wastewater treatment facility.	Construction would not occur until at least April 2010.	Approximately five miles from Big Creek 3 Substation.

SOURCES: Caltrans, 2008; City of Farmersville, 2008; City of Visalia, 2008a, 2008b and 2008c; City of Woodlake, 2009a and 2009b; County of Fresno, 2009; and County of Tulare, 2008a, 2008b and 2008c.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; City of Visalia, 2008; City of Farmersville, 2008; Tulare County, 2008; City of Woodlake, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 3-2
Cumulative Projects

References – Alternatives and Cumulative Projects

- California Energy Commission (CEC) 2007. Distributed Generation and Cogeneration Policy Road Map for California, Staff Report. March 2007. Publication number 500-2007-021.
- California Energy Commission (CEC), 2003. Renewable Resources Development Report. Commission Report, November 2003. Publication number 500-03-080F.
- Caltrans, 2008. Email correspondence between David Deel (Caltrans) and Casey Bradley (ESA), September 17, 2008.
- City of Farmersville, 2008. Telephone conversation between Sarah Crumly (City of Farmersville) and Nichole Yeto (ESA), November 7, 2008.
- City of Visalia, 2008a. *City of Visalia Tentative Subdivision Map – Last 5 years*, updated on June 6, 2008.
- City of Visalia, 2008b. Letter from Brandon Smith, Senior Planner for the City of Visalia’s Community Development Department, September 22, 2008.
- City of Visalia, 2008c. Email correspondence between Brandon Smith (City of Visalia) and Nichole Yeto (ESA), November 10, 2008.
- City of Woodlake, 2009a. Telephone conversation between Ruth Gonzalez (City of Woodlake) and Claire Early (ESA), March 26, 2009.
- City of Woodlake, 2009b. Email correspondence between Ruth Gonzalez (City of Woodlake) and Claire Early (ESA), March 30, 2009.
- County of Fresno, 2009. Email correspondence between Christopher Motta (County of Fresno) and Nichole Yeto (ESA), April 14, 2009.
- County of Tulare, 2008a. *Notice of Preparation and Initial Study for Yokohl Ranch Project*, prepared by PBS&J for the County of Tulare, February 2008.
- County of Tulare, 2008b. Notice of Preparation of a Draft Environmental Impact Report for Avenue 280 (Caldwell Avenue) Widening Project, August 2008.
- County of Tulare, 2008c. Email correspondence between Beverley Cates (County of Tulare) and Nichole Yeto (ESA), November 5, 2008.
- Southern California Edison Company (SCE), 2008. Application of Southern California Edison Company for a Certificate of Public Convenience and Necessity to Construct the San Joaquin Cross Valley Loop Transmission Project. Filed May 30, 2008.
- SCE, 2008. Proponent’s Environmental Assessment San Joaquin Cross Valley Loop Project. Filed May 30, 2008.
- SCE, 2008. Response to Data Request #1. June 17, 2008.
- SCE, 2008. Response to Data Request #2. June 23, 2008.

SCE, 2008. Response to Data Request #3. August 7, 2008.

SCE, 2008. Response to Data Request #4. August 21, 2008.

SCE, 2008. Response to Data Request #5. November 26, 2008.

SCE, 2009. Response to Data Request #6. February 6, 2009.

CHAPTER 4

Environmental Analysis

Introduction to Environmental Analysis

This chapter provides discussion and full public disclosure of the significant environmental impacts of the Proposed Project and alternatives, including the No Project Alternative. This chapter examines the potential environmental impacts associated with the Proposed Project and alternatives as they relate to the following 15 areas of environmental analysis:

- | | |
|-------------------------------------|------------------------------------|
| 4.1 Aesthetics | 4.9 Land Use and Planning |
| 4.2 Agriculture Resources | 4.10 Noise |
| 4.3 Air Quality | 4.11 Population and Housing |
| 4.4 Biological Resources | 4.12 Public Services |
| 4.5 Cultural Resources | 4.13 Recreation |
| 4.6 Geology, Soils and Seismicity | 4.14 Transportation and Traffic |
| 4.7 Hazards and Hazardous Materials | 4.15 Utilities and Service Systems |
| 4.8 Hydrology and Water Quality | |

Analysis within each issue area includes consideration of the following components of the Proposed Project:

- Replacement of approximately 1.1 miles of two parallel sets of existing single circuit 220 kV transmission line segments with 1.1 miles of double circuit transmission line constructed on the western side of SCE's existing right-of-way (ROW) immediately north of the Rector Substation. This would clear the eastern side of the existing SCE ROW in order to provide a location for the construction of the first 1.1 miles of the new transmission line described immediately below.
- Construction of a new, approximately 18.5-mile long, double circuit 220 kV transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the 220 kV Rector Substation, creating the new Big Creek 3-Rector No. 2 220 kV transmission line circuit and the new Rector-Springville 220 kV transmission line circuit. The first 1.1 miles of the new double circuit transmission line would be on the eastern side of SCE's existing ROW adjacent to the reconstructed double circuit 1.1 mile line segment described above.

- Installation of electrical equipment and substation supporting structures for the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at Rector Substation to accommodate the transmission lines; and
- Removal of wave traps and line tuners and installation of additional protective relays at the Rector Substation, Springville Substation, Vestal Substation, and Big Creek 3 Substations.

Within each of the environmental areas listed above, the discussion of project impacts is provided in the following format:

- Environmental Setting
- Regulatory Setting (i.e., applicable regulations, plans, and standards)
- Significance Criteria
- Applicant Proposed Measures
- Environmental Impacts and Mitigation Measures for the Proposed Project
- Cumulative Impacts for the Proposed Project
- Environmental Impacts and Mitigation Measures for the Alternatives including the No Project Alternative

In addition to the No Project Alternative, the following alternatives are fully analyzed in this EIR (refer to Chapter 3 for a description of each alternative):

- Alternative 2
- Alternative 3
- Alternative 6

Each environmental issue area analyzed in this document provides background information and describes the environmental setting (baseline conditions) to help the reader understand the conditions that would cause an impact to occur. In addition, each section describes how an impact is determined to be “significant” or “less than significant”. Finally, the individual sections recommend mitigation measures to reduce significant impacts. Throughout Chapter 4, both impacts and the corresponding mitigation measures are identified by a bold letter-number designation (e.g., **Impact 4.1-1** and **Mitigation Measure 4.1-1a**).

In performing the analysis for this EIR, the EIR preparers relied on available published studies and reports and conducted independent investigations as needed. Information provided by SCE in their application and accompanying environmental documentation was also considered in the EIR analysis after independent review and assessment by the EIR preparers. The specific documents considered and relied upon are cited for each issue area in Sections 4.1 through 4.15.

Environmental Assessment Methodology

Environmental Baseline

The analysis of each issue area begins with an examination of the existing physical setting (baseline conditions as determined pursuant to section 15125(a) of the State CEQA Guidelines) that may be affected by the Proposed Project and alternatives. The effects of the Proposed Project and alternatives are defined as changes to the environmental setting that are attributable to project components or operation. Pursuant to CEQA Guidelines (Section 15125[a]), the environmental setting used to determine the impacts associated with the Proposed Project and alternatives is based on the environmental conditions that existed in the study area in August 2008 at the time the Notice of Preparation was published.

Impact Significance Criteria

Significance criteria are identified for each environmental issue area. The significance criteria serve as benchmarks for determining if a component action would result in a significant adverse environmental impact when evaluated against the baseline. According to the State CEQA Guidelines section 15382, a significant effect on the environment means "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project..."

Applicant Proposed Measures (APMs)

In the Proponent's Environmental Assessment (SCE, 2008), SCE identified the following applicant proposed measures (APMs) that would be implemented to avoid or reduce potential impacts from the Proposed Project.

- **APM-BIO-01. *Elderberry Avoidance.*** The elderberry avoidance guidelines of the USFWS (1999) would be followed. At a minimum, all ground-disturbing activities should be avoided within 15 feet of any mature elderberries with basal stem diameters of 1 inch or greater. If elderberry plants with stems having a diameter of 1 inch or greater cannot be avoided, the USFWS would be consulted to develop mitigation measures appropriate to the type of impact.
- **APM-CUL-01. *Documentation and Recordation of Affected Components of the Big Creek Hydroelectric System Historic District.*** SCE would document the affected components of the BCHSHD to National Park Service Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) Level II or Level III standards prior to their removal.

Moreover, the Project Description does incorporate procedures or protocols which directly relate to how the Proposed Project would be constructed, and which were considered as part of the project during preparation of this EIR. The Project Description, therefore, upon adoption of the Final EIR, becomes part of the Mitigation Monitoring, Reporting and Compliance Program, and the construction components and methods therein would be monitored by the CPUC.

Environmental Consequences

The EIR evaluates the environmental consequences and potential impacts that the Proposed Project and the alternatives would create. The impacts identified were compared with predetermined, specific significance criteria, and were classified according to significance categories listed in each issue area. The same methodology was applied systematically to each alternative. The cumulative impacts of the Proposed Project taken together with the related cumulative projects (listed in Section 3.6) were assessed, and mitigation measures for each impact were identified, if applicable. The focus in the cumulative impact analyses was to identify those project impacts that might not be significant when considered alone, but contribute to a significant impact when viewed in conjunction with past, current, and reasonably foreseeable future projects. A comparative analysis of the Proposed Project and the alternatives is provided in Chapter 5 of this document.

Impact Analysis

The EIR evaluates the potential environmental impacts that the Proposed Project and alternatives would create. Impacts are classified as:

- Class I:** Significant; cannot be mitigated to a level that is less than significant
- Class II:** Significant; can be mitigated to a level that is less than significant
- Class III:** Less than significant, no mitigation required
- Class IV:** Beneficial impact
- No Impact:** No impact identified.

When significant impacts are identified, feasible mitigation measures are formulated to eliminate or reduce the intensity of the impacts and focus on the protection of sensitive resources. The effectiveness of a mitigation measure is subsequently determined by evaluating the impact remaining after its application. Those impacts meeting or exceeding the impact significance criteria after mitigation are considered residual impacts that remain significant (Class I). Implementation of more than one mitigation measure may be needed to reduce an impact below a level of significance. The mitigation measures recommended in this document are identified within each issue area section (Sections 4.1 through 4.15) and are presented in the Mitigation Monitoring, Reporting and Compliance Program in Chapter 8 of this document.

Cumulative Projects Impact Analysis

Section 6.4 presents the cumulative impact scenario. The focus in the cumulative impact analysis was to identify those project impacts that might not be significant when considered alone, but may contribute to a significant impact when viewed in conjunction with past, current, and reasonably foreseeable future projects.

Impacts of Alternatives

Chapter 3 provides a list, description, and map that identify alternatives to the Proposed Project. Each issue area section (Sections 4.1 through 4.15) presents the impact analysis for each alternative, while Chapter 5 provides a summary of the collective impacts of each alternative in comparison with the impacts of the Proposed Project.

References – Environmental Analysis

Southern California Edison (SCE), 2008. *Proponent's Environmental Assessment for the San Joaquin Cross Valley Loop Transmission Project*, May 2008.

4.2 Agricultural Resources

This section identifies and evaluates issues related to agricultural resources in the context of the Proposed Project and alternatives. It includes a description of existing land use conditions in relation to agricultural resources and an evaluation of potential impacts associated with implementation of the Proposed Project and alternatives. A discussion of applicable State, local and regional plans and/or programs is also included.

4.2.1 Setting

Existing Agriculture Resources

The San Joaquin Valley's fertile floor is extensively cultivated for both food crops and livestock. Consequently, Tulare County is typically rural in character, with open pastures and scattered ranches and residences. The County is the second-leading producer of agricultural commodities in the United States, with a total gross production value of 4.9 billion dollars in 2007 (Tulare County, 2008; Tulare County Agriculture Commissioner, 2008). The top 10 products produced in Tulare County in 2007, by total value, were: milk, oranges, cattle and calves, grapes, alfalfa, corn, walnuts, peaches, almonds, and plums (Tulare County Agriculture Commissioner, 2008).

Tulare County is known in particular for its citrus industry, with almost 111,000 acres of citrus (Tulare County Agriculture Commissioner, 2008). California's citrus industry ranks second in the United States after Florida. California produces 24 percent of the nation's oranges, and its crop accounts for 80 percent of those going to the fresh-market (USDA, 2008c). Tulare County is the number one producer of oranges in California, and the leading grower of fresh-market oranges in the nation (Tulare County, 2007a). Supporting oranges, lemons, and other citrus crops, Tulare County's 'Citrus Belt' extends from Porterville through Lindsay, Exeter and Dinuba. It is characterized by a climate, elevation, soil, and water availability that act as a buffer against frost (Visalia Times Delta, 2008).

According to the 2002 Census of Agriculture, there are 1,393,456 acres of farmland in Tulare County, including its component cities (USDA, 2002). The Proposed Project would traverse parcels that are currently agricultural in nature, varying from orchards to row crops to grazing lands. The alternatives would traverse parcels that are primarily orchards, open space, and grazing lands. Table 4.2-1 shows the kinds of crops and estimated acreages for orchard and row crops currently grown in the rights-of-way (ROW) for the Proposed Project and alternatives. The most common crop grown in each ROW is oranges, followed by walnuts.

Important Farmland

To characterize the environmental baseline for agricultural resources, Important Farmland Maps produced by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) were reviewed. Important Farmland maps show categories of *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland*, *Farmland of Local Importance* (if adopted by the county), *Grazing Land*, *Urban and Built-up Land*, *Other Land*, and *Water*. *Prime*

**TABLE 4.2-1
CROPS GROWN IN ROW OF PROPOSED PROJECT AND ALTERNATIVES**

Type	Total Acres			
	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Alfalfa	6.0	--	--	--
Almond	--	15.9	15.9	11.6
Cherry	2.6	5.2	7.8	5.2
Citrus	--	--	--	2.3
Corn	11.3	--	--	--
Grape	--	4.3	--	--
Grapefruit	0.2	--	--	--
Grass Hay	--	10.0	11.0	1.4
Kiwi	--	6.5	5.8	6.5
Lemon	2.9	--	--	--
Nectarine	--	1.5	--	--
Olive	5.6	12.7	11.6	16.7
Orange	108.1	94.2	73.1	125.4
Orange Grapefruit Mix	1.9	--	--	--
Peach	--	1.1	1.1	1.1
Plum	12.8	19.0	10.0	3.6
Pomegranate	3.0	--	--	--
Tangerine	2.6	8.4	2.4	2.5
Walnut	36.0	25.2	25.2	25.2
Total	193.1	204.2	163.9	201.5

NOTE: Existing ROW is estimated to have a width of 150 feet. Proposed ROW is estimated to have a width of 100 feet. Values rounded to one decimal point.

SOURCE: SCE, 2008c (Proposed Project and Alternatives 2, and 3); ESA, 2009 (Alternative 6).

Farmland and *Farmland of Statewide Importance* map categories are based on qualifying soil types, as determined by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), as well as current land use. The Department of Conservation's FMMP defines these map categories as follows:

Prime Farmland: Land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.

Farmland of Statewide Importance: Land that is similar to *Prime Farmland* but with minor shortcomings, such as greater slopes or less ability to hold and store moisture.

Unique Farmland: Land of lesser quality soils used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. It is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of crops include oranges, olives, avocados, rice, grapes, and cut flowers.

Farmland of Local Importance: Land of importance to the local agricultural economy, as determined by each county’s board of supervisors and local advisory committees. Examples include dairies, dryland farming, aquaculture, and uncultivated areas with soils qualifying for *Prime Farmland* and *Farmland of Statewide Importance*.

Grazing Land: Land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.

Urban and Built-up Land: Land used for residential, industrial, commercial, construction, institutional, public administrative purpose, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are also included in this category.

Other Land: Land which is not included in any of the other mapping categories. Common examples include low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres.

Water: Water areas with an extent of at least 40 acres.

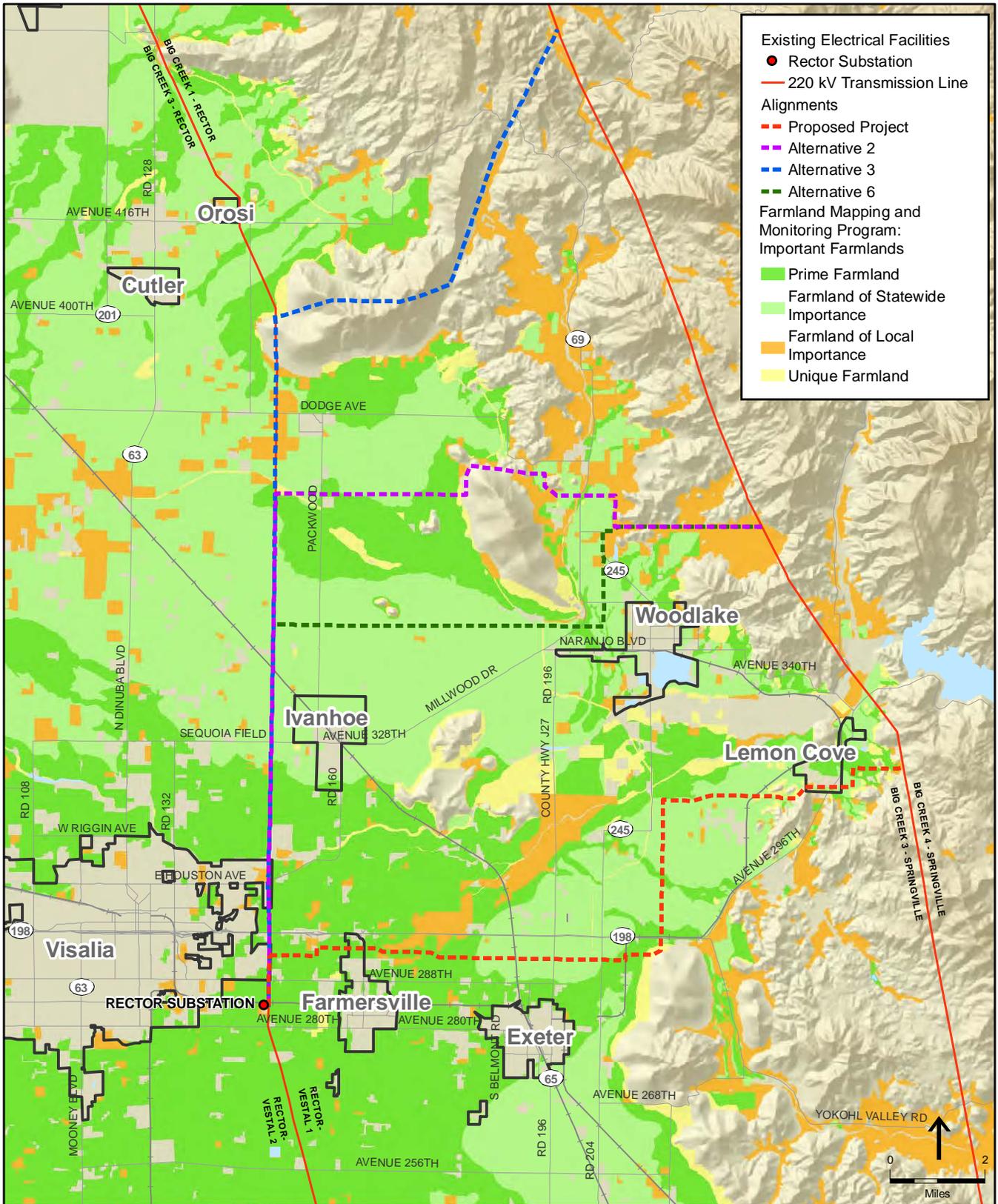
Table 4.2-2 shows the acres of farmland in Tulare County in 2004 and 2006, as well as the amount of recent farmland conversions.

**TABLE 4.2-2
FARMLAND CONVERSION FROM 2004–2006 IN TULARE COUNTY**

Land Use Category	Total Acres Inventoried		2004–2006 Acreage Changes		
	2004	2006	Acres Lost	Acres Gained	Net Change
Prime Farmland	384,388	379,762	5,907	1,281	-4,626
Farmland of Statewide Importance	339,579	332,159	8,961	1,541	-7,420
Unique Farmland	12,527	12,218	862	553	-309
Farmland of Local Importance	137,436	143,826	3,026	9,416	6,390
Grazing Land	440,620	440,135	1,100	615	-485
Agricultural Land Subtotal	1,314,550	1,308,100	19,856	13,406	-6,450

SOURCE: FMMP, 2008.

The Proposed Project would traverse parcels that contain soils classified as *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland*, *Farmland of Local Importance*, *Grazing Land*, and *Urban and Built-up Land* (Figure 4.2-1). Table 4.2-3 shows the acres of farmland in Tulare County that the ROW of the Proposed Project and alternatives would traverse. Forty-six percent of Proposed Project ROW would be located in land designated as *Farmland of Statewide Importance*, while 42 percent would be located in *Prime Farmland*. Approximately one percent of land in the Proposed Project ROW is designated *Urban and Built-up*. The Alternative 2 ROW



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; FMMP, 2006

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.2-1
Important Farmlands

**TABLE 4.2-3
AGRICULTURAL LAND CONTAINED IN THE RIGHT-OF-WAY OF THE
PROPOSED PROJECT AND ALTERNATIVES**

	Total Acres in ROW			
	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Prime Farmland	97.3	89.3	68.2	67.2
Farmland of Statewide Importance	105.5	132.6	109.0	151.0
Unique Farmland	5.7	4.3	6.8	0.1
Farmland of Local Importance	8.2	61.8	53.7	48.6
Grazing Land	11.4	29.6	123.5	3.7
Urban and Built-up Land	2.8	14.0	14.0	14.0
Land not mapped by FMMP	0.0	9.0	6.7	6.9
Total	231.1	340.7	381.9	291.5

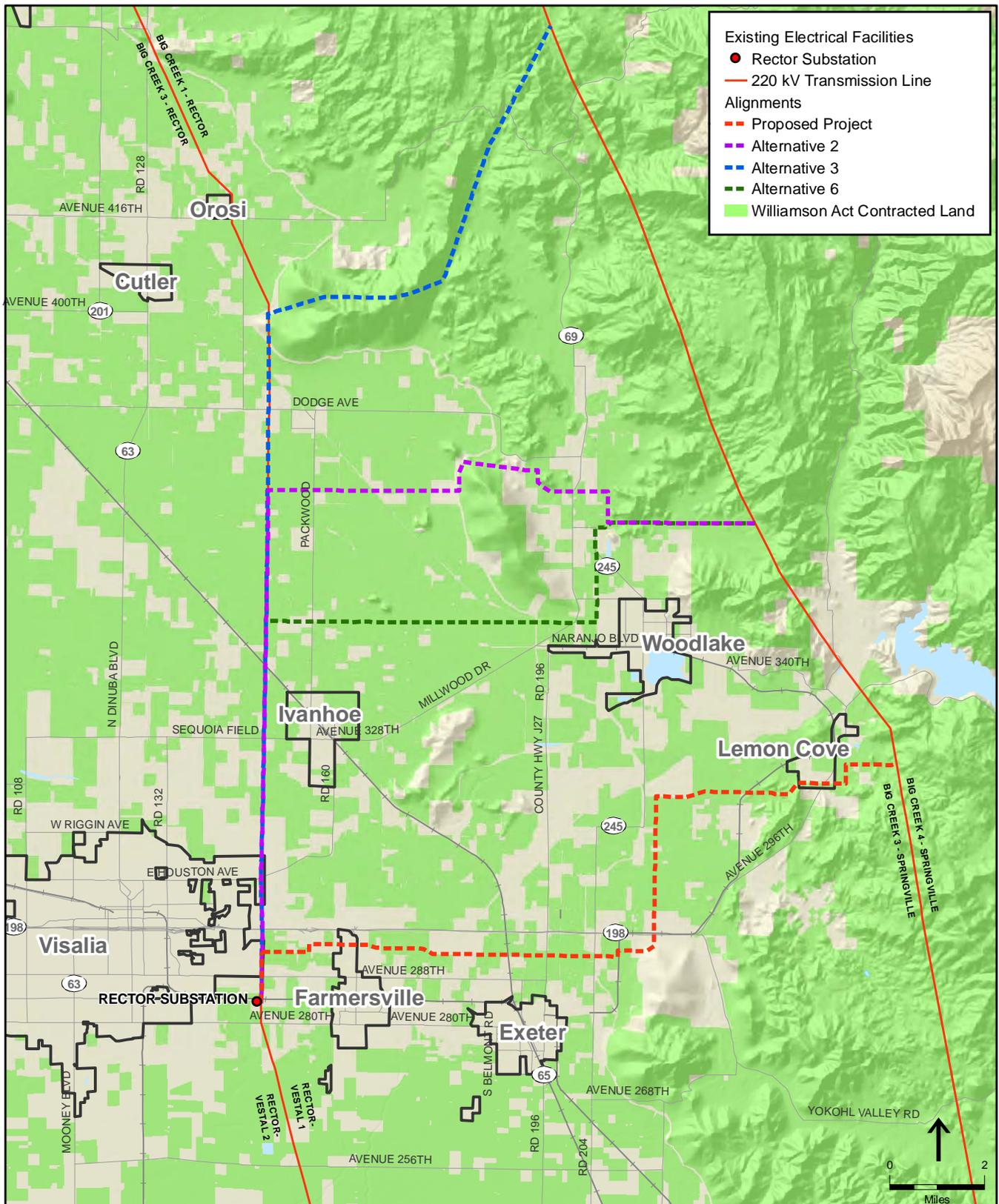
NOTE: Existing ROW is estimated to have a width of 150 feet. Proposed ROW is estimated to have a width of 100 feet. Values rounded to one decimal point.

SOURCE: FMMP, 2006.

would mainly traverse lands designated as *Farmland of Statewide Importance* and *Prime Farmland*. Alternative 3 would primarily traverse *Farmland of Statewide Importance* and *Grazing* (Figure 4.2-1). Alternative 6 would primarily traverse *Farmland of Statewide Importance* and *Prime Farmland* (FMMP, 2006).

Williamson Act Contracts

Williamson Act contracts are a tool often used by local governments to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses (see Regulatory Context below for more specific details). Approximately 34 percent of the land acreage in Tulare County is currently in a Williamson Act contract (Tulare County RMA, 2009). The Proposed Project would permanently disturb 23 acres of land currently under a Williamson Act contract (affecting approximately 66 parcels under contract), and temporarily disturb 36 acres. Alternative 2 would permanently disturb 35 acres of Williamson Act contracted land (affecting approximately 58 parcels under contract), and temporarily disturb 77 acres. Alternative 3 would permanently disturb 59 acres of Williamson Act contracted land (affecting approximately 53 parcels under contract), and temporarily disturb 103 acres. Alternative 6 would permanently disturb approximately 30 acres of Williamson Act contracted land (affecting approximately 74 parcels under contract), and temporarily disturb approximately 51 acres.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; DOC, 2004

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.2-2
Williamson Act Contracted Land

Regulatory Setting

State

California Farmland Mapping and Monitoring Program

The California Department of Conservation, under the Division of Land Resource Protection, has set up the FMMP. The FMMP monitors the conversion of the State's farmland to and from agricultural use. The map series identifies eight classifications and uses a minimum mapping unit size of 10 acres. The FMMP also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The FMMP is an informational service only and does not have regulatory jurisdiction over local land use decisions. For the purpose of this environmental analysis and consistency with the Farmland Policy Act of 1981, farmland includes *Prime Farmland*, *Unique Farmland*, and *Farmland of Statewide Importance* or *Farmland of Local Importance*, and any conversion of land within these categories is typically considered to be an adverse impact.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) serves to preserve open spaces and agricultural land. It discourages urban sprawl and prevents landowners from developing their property for the greater land value of commercial and/or residential uses. The Williamson Act is a State program that allows agricultural landowners to pay reduced property taxes in return for their contractual agreement to retain the land in agricultural and open space uses for a period of 10 years. The term of the contract automatically renews each year, so that the contract always has a 10 year period left to function. The Williamson Act Program was revised by the enactment of Farmland Security Zone (FSZ) legislation during the 1998 legislative session, offering landowners greater property tax reduction in exchange for a longer contract term than under the Williamson Act Program.

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

For all County lands within the study area, the Tulare County General Plan land use designation is *Agriculture* (Washam, 2008). However, the Tulare County General Plan has two amendments that further classify agricultural lands in the County: the Rural Valley Lands Plan (1975) and the Foothill Growth Management Plan (1981). See Section 4.9, *Land Use, Planning, and Policies* for further discussion.

The following goals and policies identified in the Tulare County General Plan Land Use and Urban Boundaries Element may be applicable to the Proposed Project and alternatives:

Goal 1LU.A: Retention of community identity, preservation of the agricultural economic base and control of urban sprawl.

Policy 1LU.A.4: The predominant agricultural character of land between communities should be preserved.

Policy 1LU.A.5: Weight should be given to agricultural land quality and productivity in determining areas of urban expansion. Special emphasis should be given to the preservation of Class I soils and lands which produce or are capable of producing high value specialty crops by encouraging urban extensions into less productive areas where such opportunities are present.

The following policies identified in the Tulare County General Plan Environmental Resources Management Element may be applicable to the Proposed Project and alternatives:

Policy 6.I.5: Attempt to maintain agriculture as a primary, extensive land use, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's real contribution to the economic conservation of open space and natural resources.

Policy 6.I.6: Recognize the need to utilize the Williamson Land Conservation Act on all agricultural lands throughout the county and not just within three miles of the city limits. It should support the concept that agriculture is a total, functioning system, which will suffer when any part of it is subjected to conflicts of land use, urban-based speculative tax procedures, or excessive fragmentation. It should be aggressive in its support, at the state level, of the use of the Land Conservation Act to protect viable agricultural and other open space lands throughout the county, without limitation by the rationale that only land within three miles of the city limits is threatened by urban uses. The County Board of Supervisors should pass a resolution stating that all lands in the county otherwise eligible for this program are subject to such pressure and should be included in the Williamson Land Conservation Act agricultural preserves. The Local Agency Formation Commission should concur in this action.

Policy 6.J.2: Urban uses should be permitted on Class I, II, and III soils only when they are located within the Spheres of Influence around each municipality and service center community within the county.

(Tulare County, 2001).

Tulare County Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County Zoning Ordinance has specific zoning designations for agricultural lands. The AE-20, AE-40, and AE-80 Districts are intended to be applied to land areas which are used or are suitable for use for intensive agricultural production on 20, 40, and 80 acre minimum parcels, respectively. The AF District is intended to be applied to agricultural and open space protection. The A-1 District is intended to provide an area for agricultural production (Tulare County, 2007b). See Section 4.9, *Land Use, Planning, and Policies*, for further discussion.

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia General Plan designates a portion of the parcels through which the Proposed Project and alternatives would traverse as *Agriculture*. The following policy and objective identified in the General Plan Land Use Element would be applicable to the Proposed Project and alternatives:

Policy 6.1.3: Preserve and enhance the planning area's natural features and resource lands.

Objective A: Protect agricultural land from premature urban development.

(City of Visalia, 1996).

The following goal identified in the General Plan Conservation and Open Space Element may be applicable to the Proposed Project and alternatives:

Goal 2, Objective C: Preserve and protect agricultural use on lands in and surrounding the Visalia Planning Area for open space purposes and managed production of resources.

(City of Visalia, 1989).

City of Visalia Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)

The Proposed Project would not traverse any parcels zoned *Agriculture* by the City of Visalia Zoning Ordinance. Alternatives 2, 3 and 6 would traverse land zoned *Agriculture* (City of Visalia, 2008). See Section 4.9, *Land Use, Planning, and Policies*, for further discussion.

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan designates a portion of the parcels through which the Proposed Project would traverse as *Agriculture/Urban Reserve*. The following goal identified in the General Plan Land Use Element may be applicable to the Proposed Project:

Issue Nine: Agricultural Lands, Goal 1: Farmersville will ensure that its primary economic base (agriculture) is protected.

The following goal identified in the General Plan Conservation, Open Space, Parks and Recreation Element may be applicable to the Proposed Project:

Issue Four: Urban Boundaries and Farmland Protection, Goal 1, Objective 1: Preserve and protect agricultural lands as a means for providing open space and for the managed production of resources.

(City of Farmersville, 2002).

City of Farmersville Zoning Ordinance (Proposed Project)

The Proposed Project and alternatives would not traverse any parcels in the City of Farmersville zoned for agriculture.

4.2.2 Significance Criteria

The significance criteria for this analysis were developed from criteria presented in Appendix G of the *CEQA Guidelines*. The project would result in a significant impact to agricultural resources if it would:

- a) Convert *Prime Farmland, Unique Farmland, or Farmland of Statewide Importance* (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

4.2.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on agriculture resources.

4.2.4 Impacts and Mitigation Measures

Approach to Analysis

Based on the *CEQA Guidelines*, the analysis considers whether the Proposed Project would result in impacts to *Prime Farmland*, *Unique Farmland*, and *Farmland of Statewide Importance* (hereafter collectively referred to as Farmland). For information purposes, impacts to *Farmland of Local Importance* and *Grazing* are provided below; however, from a CEQA perspective, impacts to these agricultural designations are not considered significant, and consequently, do not require mitigation.

This impact analysis considers the potential agricultural effects of activities associated with the construction, operation, and maintenance of the Proposed Project, including modification of the Rector, Springville, Vestal, and Big Creek 3 Substations. The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades. All substation work would occur on previously disturbed areas within the existing footprint of the substations, and the associated construction, operation and maintenance activities would have no impact to agricultural resources. Similarly, the same type of electrical system and safety upgrade activities proposed for the Rector Substation would not have any potential impacts to agricultural resources.

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Impact 4.2-1: Construction activities would result in the temporary impacts to designated Farmland. *Less than significant with mitigation* (Class II)

Proposed Project construction would involve temporary and permanent impacts to Farmland. For purposes of analyzing impacts to agricultural lands, temporary impacts would occur in areas that would be used for construction-related purposes for the duration of the Proposed Project as well as to any work area and/or pull and tension sites that may need to be prepared for use during construction. Temporary impacts do not include work areas at pole sites that would not need preparation, as no grading would occur in these areas and the duration would be less than one day.

The Proposed Project would cause temporary disturbance to Farmland due to site preparation associated with: structure construction setup areas; structure removal area; wire-stringing tension, pull and splicing sites; and guard structure locations. No temporary impacts to Farmland would

occur from the use of the two staging areas, as the staging areas would be located at existing commercial facilities near the Proposed Project (SCE, 2008a).

Table 4.2-4 shows temporary and permanent impacts to Farmland and other designated agricultural land that would result from construction related activities associated with the Proposed Project.

**TABLE 4.2-4
TEMPORARY AND PERMANENT CONSTRUCTION IMPACTS TO
AGRICULTURAL LANDS FROM THE PROPOSED PROJECT**

	Temporary Impacts (acres) ^a	Permanent Impacts (acres) ^a
Prime Farmland	29.5	16.1
Unique Farmland	2.2	0.7
Farmland of Statewide Importance	19.9	14.3
Total Farmland Impact	51.7	31.1
Farmland of Local Importance ^b	7.6	1.1
Grazing ^b	6.7	2.7

^a Values rounded to one decimal point.

^b From a CEQA perspective, impacts to these agricultural designations are not considered significant. They are provided in this analysis for informational purposes.

SOURCE: FMMP, 2006.

In total, preparation of work areas and pull and tension sites would temporarily reduce the amount of Farmland available for agricultural purposes by approximately 51.7 acres. After the completion of construction, these acres would be returned to agricultural use. Implementation of the following mitigation measures would support the continued productive use of Farmland in the project area once construction is complete.

Mitigation Measure 4.2-1a: SCE and/or its contractors shall ensure that the following measures are taken, during construction of the Proposed Project:

- Replace soils in a manner that shall minimize any negative impacts on crop productivity. The surface and subsurface layers shall be stockpiled separately and returned to their appropriate locations in the soil profile.
- To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top three feet) to within five percent of original density.
- Where necessary, the top soil layers shall be ripped to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers.

- Avoid working or traveling on wet soil to minimize compaction and loss of soil structure.
- Remove all construction-related debris from the soil surface. This shall prevent rock, gravel, and construction debris from interfering with agricultural activities.
- Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.

Mitigation Measure 4.2-1b: SCE and/or its contractors shall incorporate the following measures into the project construction plans and specifications specific to lands designated as Farmland:

- Coordinate construction scheduling as practicable so as to minimize disruption of agricultural operations by scheduling excavation to occur before or after the growing season.
- Minimize construction dust on crops by implementing Mitigation Measure 4.3-1b (see Section 4.3, *Air Quality*).
- Supply replacement crops and trees at a mitigation ratio of one to one, upon completion of construction. Coordinate planting of replacement crops and trees with landowners.

The above mitigation measures would reduce temporary construction impacts; however, a significant portion of affected Farmland contains walnut and orange orchards. It takes walnut trees and orange trees approximately 10 years to reach full maximum production (Purdue University, 2008; World Agro-forestry Center, 2008). Nonetheless, the Proposed Project's disturbance to walnut and orange orchards would be considered temporary in nature and would not result in conversion of farmland to non-agricultural use. From a CEQA perspective (i.e., impacts to the physical environment), because the lands would continue to be available for agriculture uses, the temporary disturbance to these lands would be less than significant after implementation of the above mitigation measures.

However, the CPUC recognizes that the temporary impacts to some crops (i.e., walnuts and orange orchards) could last for upwards of 10 years. While not an impact consideration in this CEQA analysis, it is noted here that the fiscal impacts related to loss of agricultural production would be addressed by SCE during its ROW acquisition process.

Significance after Mitigation: Less than Significant.

Impact 4.2-2: Construction activities would result in the permanent removal of designated Farmland. *Significant unmitigable* (Class I)

In addition to temporary impacts, the Proposed Project would cause permanent disturbance to Farmland due to construction of new permanent access roads and placement of 114 new poles and lattice towers. A 50-foot maintenance buffer would surround each pole and tower (SCE, 2008a).

However, some currently disturbed Farmland would have the potential to be returned to agricultural use. Under the Proposed Project, 12 existing lattice towers located in areas designated by the FMMP as Farmland would be removed, each of which has an approximate 24-foot by 24-foot base. Land covered by these existing towers that is not located within the maintenance area of new towers could be returned to productive agricultural use. The calculations for total permanent impacts take into account this potentially reclaimed land.¹

Table 4.2-4, above, provides a summary of the permanent impacts to Farmland from construction of the Proposed Project. In total, construction of the Proposed Project would result in a total permanent conversion of approximately 31.1 acres of Farmland, including 16.1 acres of *Prime Farmland*, 0.7 acres of *Unique Farmland*, and 14.3 acres of *Farmland of Statewide Importance*. A variety of crops are currently grown within these 31.1 acres, the most common of which are oranges (13.8 acres) and walnuts (4.6 acres). Table 4.2-5 provides the specific crops located on Farmland that would be permanently converted by the Proposed Project.

**TABLE 4.2-5
DESIGNATED FARMLAND CROPS PERMANENTLY
DISTURBED BY THE PROPOSED PROJECT**

Crop Type	Total Acres	
	Disturbed	Reclaimed
Alfalfa	0.7	--
Cherry	--	0.01
Corn	0.2	--
Lemon	0.6	--
Olive	1.0	--
Orange	13.8	--
Orange Grapefruit Mix	0.5	--
Plum	1.2	0.03
Pomegranate	0.2	--
Seasonal Corn	1.2	--
Tangerine	0.1	0.1
Walnut	4.6	--
Total	24.2^a	0.1

^a Total Farmland by crop does not add up to 31.1 acres because some Farmland is currently unplanted.

SOURCE: SCE, 2008c

¹ SCE's policy is to maintain a 50-foot maintenance area around poles and towers. However, within the existing ROW associated with the Proposed Project and alternatives, agricultural crops generally occupy what should be the maintenance areas around existing lattice structures. Therefore for purposes of this CEQA analysis, only the actual footprint of the existing lattice structures were included in reclamation calculations.

Mitigation Measure 4.2-2: For each acre of *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* that is permanently converted, SCE shall obtain one (1) acre of agricultural conservation easements. An agricultural conservation easement is a voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture. The easement places legally enforceable restrictions on the land. The exact terms of the easement are negotiated, but restricted activities shall include subdivision of that property, non-farm development, and other uses that are inconsistent with agricultural production. The mitigation lands must be of equal or better quality (according to the latest available FMMP data) and have an adequate water supply. In addition, the mitigation lands must be within the same county as the impact.

Implementation of Mitigation Measure 4.2-2 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, but not to a less than significant level. The reduction of approximately 31.1 acres of Farmland would result in the permanent conversion of Farmland. Therefore, permanent impacts to Farmland would be significant unmitigable.

Significance after Mitigation: Significant unmitigable.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Impact 4.2-3: Construction, operation and maintenance of the Proposed Project could conflict with existing zoning for agricultural use, or a Williamson Act contract. *Less than significant* (Class III)

The Proposed Project would not conflict with existing zoning for agricultural use. The Proposed Project would replace an existing transmission line in an existing utility corridor in Visalia, and the remaining new ROW would not conflict with any zoning or land use designations in Farmersville or Tulare County (see Section 4.9, *Land Use, Planning, and Policies*). In addition, agriculture is generally considered to be a compatible land use with utility corridors.

As discussed in the *Setting*, the Proposed Project would traverse land in Tulare County and the cities of Visalia and Farmersville designated for agricultural use. It would also permanently disturb 23 acres of land currently under a Williamson Act contract, and temporarily disturb 36 acres under a Williamson Act contract (see Figure 4.2-2). Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use. The placement of transmission poles/towers on land currently under Williamson Act contract would not remove the land from Williamson Act contract status. Thus, there would be a less than significant impact related to Williamson Act status of parcels through which the Proposed Project would traverse. In addition, the transmission line would allow for many agricultural uses under and adjacent to the line.

Mitigation: None required.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

Impact 4.2-4: The Proposed Project could involve removal of orchards which, due to their location or nature, could result in the conversion of additional Farmland to non-agricultural use. *Significant unmitigable (Class I)*

The Proposed Project is an energy infrastructure project, not a land development project, and it would not result in the type of impacts to agricultural resources that would be expected with a typical development project. The Proposed Project would not result in further urbanization of the area or make agricultural land vulnerable to the pressures of urbanization.

Nonetheless, the Proposed Project would have the potential to lead to the loss of Farmland to non-agricultural uses in areas where the ROW would require permanent removal of walnut orchards for maintenance purposes. Approximately 29 acres of walnut orchards located on designated Farmland would be removed from under proposed transmission lines in the new portion of the ROW. This loss of Farmland is in addition to the 4.6 acres of walnut orchards on Farmland that would be permanently disturbed by the Proposed Project, as discussed under Impact 4.2-2. Walnut trees can reach 60 feet in height (USDA, 2008b). According to SCE regulations, shrubs and trees located within the ROW (e.g., under the transmission lines) must be maintained to not exceed a 15-foot maximum height (SCE, 2008b). When cropped to 15 feet, walnut trees would no longer be productive. Consequently, the Proposed Project would cause the permanent removal of 29 acres of walnut orchards located within the ROW. Furthermore, because of the height restrictions, no reclaimed land in the existing ROW could be used for new walnut orchards. Though removal of walnut trees would not result in conversion of Farmland to non-agricultural use, the presence of the ROW would create a permanent impact to productive walnut orchards. Furthermore, farmers may or may not replant an alternative crop within the ROW. In effect, this would lead to formerly productive Farmland becoming permanently unusable.

Other crops and trees growing in the ROW include orange orchards, other fruit trees, and row crops such as alfalfa and corn. However, unlike walnut trees, orange and other citrus trees are able to remain productive even when topped at 15 feet under transmission lines (USDA, 2008a). Consequently, orange orchards and the other crops growing in the ROW would not require permanent removal in the ROW for maintenance purposes.

Mitigation Measure 4.2-4: Implement Mitigation Measure 4.2-2.

While implementation of Mitigation Measure 4.2-4 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, it would not reduce the impact to a less than significant level. The permanent removal of 29 acres of walnut orchards in designated Farmland would result in the conversion of a significant amount of agricultural land. Therefore, permanent impacts to Farmland would be significant unmitigable.

Significance after Mitigation: Significant unmitigable.

Impact 4.2-5: The Proposed Project could impact existing irrigation and other ancillary systems required for farming productivity, resulting in the conversion of Farmland to non-agricultural use. *Less than significant with mitigation* (Class II)

The Proposed Project could result in temporary or permanent removal, relocation, and/or replacement of ancillary farming systems such as water pumps, irrigation pipelines, and gas lines. Removing farmers' ability to irrigate crops and orchards could effectively render formerly productive Farmland unusable, resulting in the conversion of additional Farmland to non-agricultural use.

Mitigation Measure 4.2-5: SCE and/or its contractors shall incorporate the following measures into project construction plans and specifications specific to lands designated as Farmland:

- Ensure that existing drainage systems at Proposed Project sites that are needed for farming activities function as necessary so that agricultural uses are not disrupted.
- Coordinate with landowners to ensure that construction does not impact irrigation and/or other ancillary farming systems to a degree that farming practices cannot be maintained.
- Maintain existing levels of water available to farmers via the current irrigation system. This may include, but not be limited to, implementing re-routing and/or temporary irrigation systems.

Implementation of Mitigation Measure 4.2-5 would ensure that no additional Farmland is indirectly converted to non-agricultural use because of impacts to existing irrigation and other ancillary systems required for farming productivity.

Significance after Mitigation: Less than Significant.

4.2.5 Cumulative Impacts

Agricultural uses, including hundreds of dairies and thousands of acres of citrus and walnut groves, still dominate Tulare County's landscape; however, the County has seen a reduction in agricultural land due to urbanization. In 2006 (most recent inventory), the total acreage of Farmland in Tulare County was 736,494 acres. There has been a reduction of 12,355 acres of Farmland for Tulare County between 2004 and 2006 (see Table 4.2-2) (FMMP, 2008).

As a number of the projects discussed in Section 3.6, *Cumulative Projects*, are not yet in the environmental planning stage, the acreage of Farmland that could be converted by these projects is not known. However, in general, the acreage of Farmland in Tulare County is expected to decline. The Proposed Project would contribute incrementally to this decline.

Implementation of Mitigation Measures 4.2-1a, 4.2-1b, and 4.2-2 would minimize impacts under the Proposed Project; however, those measures would not reduce impacts related to the permanent reduction of agricultural lands to less than significant levels. Therefore, the incremental contribution of Farmland conversion associated with the Proposed Project would be a cumulatively considerable contribution to an existing significant cumulative impact. This impact would be significant unmitigable (Class I).

4.2.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no impacts to agricultural resource would occur (No Impact).

Alternative 2

a) Convert Farmland, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Approximately 93 percent of Alternative 2 would cross land designated as *Prime Farmland*, *Unique Farmland*, and *Farmland of Statewide Importance*, *Farmland of Local Importance*, and *Grazing*. The majority of Alternative 2 would traverse *Prime Farmland* and *Farmland of Statewide Importance* (see Figure 4.2-1).

Alternative 2 crosses proportionately less Farmland than the Proposed Project. Construction activities would result in greater temporary disturbance; however a greater amount of land would be restored to agricultural uses following construction resulting in less permanent impacts to Farmland. Table 4.2-6 shows temporary and permanent impacts that would result from construction related activities associated with Alternative 2.

In total, preparation of work areas and pull and tension sites would temporarily reduce the amount of Farmland by approximately 88.0 acres, approximately 36.3 more acres than the Proposed Project. After the completion of construction, these acres would be returned to agricultural use and implementation of Mitigation Measures 4.2-1a and 4.2-1b would reduce these temporary impacts to a less than significant level. Like the Proposed Project, effects to Farmland containing walnut and orange orchards would be temporary in nature and would not result in conversion of farmland to non-agricultural use. Therefore, impacts would be less than significant with mitigation (Class II).

In total, construction of Alternative 2 would result in a permanent conversion of approximately 24.0 acres of land designated as Farmland, approximately 7.2 acres less than the Proposed Project. The construction of roads and new pole sites would permanently disturb approximately

**TABLE 4.2-6
TEMPORARY AND PERMANENT CONSTRUCTION IMPACTS TO
AGRICULTURAL LANDS FROM ALTERNATIVE 2**

	Temporary Impacts (acres) ^a	Permanent Impacts (acres) ^a
Prime Farmland	33.9	9.5
Unique Farmland	2.6	0.6
Farmland of Statewide Importance	51.4	13.8
Total Farmland Impact	88.0	24.0
Farmland of Local Importance ^b	20.9	12.4
Grazing ^b	7.4	7.5

^a Values rounded to one decimal point.

^b From a CEQA perspective, impacts to these agricultural designations are not considered significant. They are provided in this analysis for informational purposes.

SOURCE: FMMP, 2006

25.8 acres of Farmland, while the removal of 151 existing towers would result in potential reclamation of 1.9 acres of Farmland. Crops growing on the 24.0 acres of Farmland that would be permanently disturbed are summarized below in Table 4.2-7. Alternative 2 would disturb approximately 4.7 less acres of oranges than the Proposed Project, and approximately 3.5 less acres of walnuts.

**TABLE 4.2-7
CROPS THAT WOULD BE PERMANENTLY DISTURBED BY
ALTERNATIVE 2**

Crop Type	Total Acres	
	Disturbed	Reclaimed
Almond	1.3	0.2
Cherry	0.0	0.1
Grape	0.3	--
Grass Hay	1.2	0.1
Kiwi	0.4	0.0
Nectarine	0.1	--
Olive	1.8	0.1
Orange	9.1	0.7
Peach	0.1	--
Plum	2.5	0.1
Tangerine	1.9	0.0
Walnut	1.1	--
Total	19.8^a	1.2

^a Total Farmland by crop does not add up to 24 acres because some Farmland is currently unplanted.

SOURCE: SCE, 2008c

Implementation of Mitigation Measure 4.2-2 would reduce the impact of the proposed permanent conversion of Farmland to non-agricultural uses, but not to a less than significant level. Therefore, similar to the Proposed Project, permanent impacts to Farmland would be significant unmitigable (Class I).

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Like the Proposed Project, Alternative 2 would not conflict with existing zoning for agricultural use; therefore, impacts would be less than significant (Class III).

Alternative 2 would traverse land in Tulare County and the City of Visalia zoned for agricultural use. Compared to the Proposed Project, Alternative 2 would permanently and temporarily disturb 12 and 41 more acres, respectively, of land currently under a Williamson Act contract (see Figure 4.2-2). However, electrical facilities are considered compatible with Williamson Act use. Therefore, although Alternative 2 would cause greater temporary and permanent impacts to lands under a Williamson Act contract, overall, impacts would remain less than significant (Class III).

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

Similar to the Proposed Project, Alternative 2 would not result in further urbanization of the area or make agricultural land vulnerable to the pressures of urbanization. However, like the Proposed Project, Alternative 2 would lead to the additional loss of designated Farmland and non-designated farmland to non-agricultural uses, due to permanent removal of walnut orchards under the ROW.

Approximately 12 acres of walnut orchards are located within the existing SCE ROW associated with Alternative 2 which is 17 acres less than the Proposed Project. Alternative 2 would permanently remove these walnut orchards from production. As with the Proposed Project, farmers may or may not replant an alternative crop within the ROW, which could lead to formerly productive agricultural land becoming permanently unusable. While implementation of Mitigation Measure 4.2-4 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, it would not be reduced to a less than significant level. The permanent removal of 12 acres of walnut orchards would result in the conversion of Farmland. Therefore, permanent impacts to Farmland would be significant unmitigable (Class I).

Also similar to the Proposed Project, Alternative 2 could result in impacts to irrigation systems and/or ancillary farming systems that could result in the indirect conversion of Farmland to non-agricultural use. Implementation of Mitigation Measure 4.2-5 would reduce the impact of this potential conversion of Farmland to less than significant (Class II).

Alternative 3

a) Convert Farmland, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Approximately 95 percent of Alternative 3 would cross lands designated as *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland*, *Farmland of Local Importance*, and *Grazing*. The majority of the Alternative 3 would traverse *Farmland of Statewide Importance* and *Grazing* (see Figure 4.2-1).

Construction of Alternative 3 would result in greater temporary impacts to Farmland, but less permanent impacts than the Proposed Project. Table 4.2-8 shows temporary and permanent impacts that would result from construction related activities associated with Alternative 3.

**TABLE 4.2-8
 TEMPORARY AND PERMANENT CONSTRUCTION IMPACTS TO
 AGRICULTURAL LANDS FROM ALTERNATIVE 3**

	Temporary Impacts (acres) ^a	Permanent Impacts (acres) ^a
Prime Farmland	29.4	6.6
Unique Farmland	6.3	0.9
Farmland of Statewide Importance	49.2	9.2
Total Farmland Impacts	85.0	16.7
Farmland of Local Importance ^b	27.4	7.5
Grazing ^b	38.8	42

^a Values rounded to one decimal point.

^b From a CEQA perspective, impacts to these agricultural designations are not considered significant. They are provided in this analysis for informational purposes.

SOURCE: FMMP, 2006

In total, preparation of work areas and pull and tension sites would temporarily reduce the amount of Farmland by approximately 85.0 acres, approximately 33.3 more acres than the Proposed Project. After the completion of construction, these acres would be returned to agricultural use and implementation of Mitigation Measures 4.2-1a and 4.2-1b would reduce these temporary impacts to a less than significant level. Like the Proposed Project, effects to Farmland containing walnut and orange orchards would be temporary in nature and would not result in conversion of Farmland to non-agricultural use. Therefore, impacts would be less than significant with mitigation (Class II).

In total, construction of Alternative 3 would result in a total permanent conversion of approximately 16.7 acres of land designated as Farmland, approximately 14.4 acres less than Proposed Project. While the construction of roads and new pole sites would permanently disturb

approximately 18.7 acres of Farmland, removal of 167 existing towers would result in potential reclamation of 2.0 acres. Crops growing on the 16.7 acres of Farmland that would be permanently removed are summarized below in Table 4.2-9. Alternative 3 would disturb approximately 7.5 less acres of oranges than the Proposed Project, and approximately 3.5 less acres of walnuts.

**TABLE 4.2-9
CROPS THAT WOULD BE PERMANENTLY DISTURBED BY
ALTERNATIVE 3**

Crop Type	Total Acres	
	Disturbed	Reclaimed
Almond	1.3	0.2
Cherry	0.4	0.0
Grass Hay	1.0	0.1
Kiwi	0.3	0.0
Olive	1.4	0.1
Orange	6.3	0.8
Peach	0.1	--
Plum	1.3	0.1
Tangerine	--	0.1
Walnut	1.1	--
Total	13.4^a	1.4

^a Total Farmland by crop does not add up to 16.7 acres because some Farmland is currently unplanted.

SOURCE: SCE, 2008c

Implementation of Mitigation Measure 4.2-2 would reduce the impact of the proposed permanent conversion of Farmland to non-agricultural uses, but not to a less than significant level. Therefore, similar to the Proposed Project, permanent impacts to Farmland would be significant unmitigable (Class I).

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Like the Proposed Project, Alternative 3 would not conflict with existing zoning for agricultural use; therefore, impacts would be less than significant (Class III).

Alternative 3 would traverse land in Tulare County and the City of Visalia zoned for agricultural use. Compared to the Proposed Project, Alternative 3 would permanently and temporarily disturb 36 and 67 more acres, respectively, of land currently under a Williamson Act contract (see Figure 4.2-2). However, electrical facilities are considered compatible with Williamson Act use. Therefore, although Alternative 3 would cause greater temporary and permanent impacts to lands under a Williamson Act contract, overall, impacts would remain less than significant (Class III).

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

Similar to the Proposed Project, Alternative 3 would not result in further urbanization of the area or make agricultural land vulnerable to the pressures of urbanization, but would lead to the additional loss of Farmland to non-agricultural uses due to loss of walnut orchards in the ROW.

Approximately 12 acres of walnut orchards are located within the existing SCE ROW associated with Alternative 3 which is 17 acres less than the Proposed Project. Alternative 3 would permanently remove these walnut orchards from production. As with the Proposed Project, farmers may or may not replant an alternative crop within the ROW, which could lead to formerly productive agricultural land becoming permanently unusable. While implementation of Mitigation Measure 4.2-4 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, it would not be reduced to a less than significant level. The permanent removal of 12 acres of walnut orchards would result in the conversion of Farmland. Therefore, permanent impacts to Farmland would be significant unmitigable (Class I).

Also similar to the Proposed Project, Alternative 3 could result in impacts to irrigation systems and/or ancillary farming systems that could result in the indirect conversion of Farmland to non-agricultural use. Implementation of Mitigation Measure 4.2-5 would reduce the impact of this potential conversion of Farmland to less than significant (Class II).

Alternative 6

a) Convert Farmland, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non agricultural use.

Approximately 93 percent of Alternative 6 would cross lands designated as *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland*, *Farmland of Local Importance*, and *Grazing*. The majority of the Alternative 6 would traverse *Farmland of Statewide Importance* and *Prime Farmland* (see Figure 4.2-1).

As discussed in the setting, since Alternative 6 was developed by the EIR Preparers, detailed construction metrics have not been developed by SCE. Nevertheless, using construction metrics derived from SCE data developed for Alternative 2 (described in detail in Chapter 3), construction of Alternative 6 would likely result in greater temporary and less permanent impacts to Farmland than the Proposed Project. Table 4.2-10 shows estimated temporary and permanent impacts that would result from construction related activities associated with Alternative 6.

In total, preparation of work areas and pull and tension sites would temporarily reduce the amount of Farmland by approximately 72.2 acres, approximately 20.5 more acres than the Proposed Project. However, after the completion of construction, temporarily disturbed acres would be returned to agricultural use and implementation of Mitigation Measures 4.2-1a and 4.2-1b would

**TABLE 4.2-10
TEMPORARY AND PERMANENT CONSTRUCTION IMPACTS TO
AGRICULTURAL LANDS FROM ALTERNATIVE 6**

	Temporary Impacts (acres) ^a	Permanent Impacts (acres) ^a
Prime Farmland	28.1	6.7
Unique Farmland	0.0	0.0
Farmland of Statewide Importance	44.1	24.0
Total Farmland Impacts	72.2	30.7
Farmland of Local Importance ^b	14.7	9.6
Grazing ^b	0.4	0.8

- ^a Values rounded to one decimal point. Temporary and permanent impact values represent approximations based upon information for Alternative 2 provided by the project applicant and information provided in the PEA. See Chapter 3 for details on construction assumptions.
- ^b From a CEQA perspective, impacts to these agricultural designations are not considered significant. They are provided in this analysis for informational purposes.

SOURCE: FMMP, 2006

reduce these temporary impacts to a less than significant level. Like the Proposed Project, effects to Farmland containing walnut and orange orchards would be temporary in nature and would not result in conversion of Farmland to non-agricultural use. Therefore, impacts would be less than significant with mitigation (Class II).

In total, construction of Alternative 6 would result in a total permanent conversion of approximately 30.7 acres of land designated as Farmland, approximately 0.4 acres less than Proposed Project. While the construction of roads and new pole sites would permanently disturb approximately 32.0 acres of Farmland, removal of 138 existing towers would result in potential reclamation of 1.3 acres. Crops growing on the 30.7 acres of Farmland that would be permanently removed are summarized below in Table 4.2-11. Alternative 6 would disturb approximately 6.9 more acres of oranges than the Proposed Project, and approximately 3.5 less acres of walnuts.

While implementation of Mitigation Measure 4.2-2 would reduce the impact of permanent conversion of Farmland to non-agricultural uses, it would not be reduced to a less than significant level. Therefore, similar to the Proposed Project, permanent impacts to Farmland would be significant unmitigable (Class I).

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Like the Proposed Project, Alternative 6 would not conflict with existing zoning for agricultural use; therefore, impacts would be less than significant (Class III).

**TABLE 4.2-11
CROPS THAT WOULD BE PERMANENTLY DISTURBED BY
ALTERNATIVE 6**

Crop Type	Total Acres ^a	
	Disturbed	Reclaimed
Almond	1.0	0.1
Cherry	0.0	0.1
Grape	0.1	0.0
Kiwi	0.4	0.0
Olive	2.1	0.0
Orange	21.2	0.5
Peach	0.1	0.0
Plum	0.7	0.0
Stone fruit	0.4	0.0
Tangerine	0.3	0.0
Walnut	1.1	0.0
Total^b	27.4	0.7

^a Values rounded to one decimal point. Temporary and permanent impact values represent approximations based upon information for Alternative 2 provided by the project applicant and information provided in the PEA. See Chapter 3 for details on construction assumptions.

^b Total Farmland by crop does not add up to 30.7 acres because some Farmland is currently unplanted.

SOURCE: SCE, 2008c; ESA, 2009

Alternative 6 would traverse land in Tulare County and the City of Visalia zoned for agricultural use. Based on construction metrics described in Chapter 3, compared to the Proposed Project Alternative 6 would likely permanently and temporarily disturb seven and 15 more acres, respectively, of Williamson Act Contracts (see Figure 4.2-2). However, electrical facilities are considered compatible with Williamson Act use. Therefore, although Alternative 6 would cause temporary and permanent impacts to lands under a Williamson Act contract, overall, impacts would remain less than significant (Class III).

c) Involve other changes in the existing environment which, due to their location or nature could result in conversion of Farmland, to non-agricultural use.

Similar to the Proposed Project, Alternative 6 would not result in further urbanization of the area or make agricultural land vulnerable to the pressures of urbanization, but would lead to the additional loss of Farmland to non-agricultural uses due to loss of walnut orchards in the ROW.

Approximately 12 acres of walnut orchards are located within the existing SCE ROW associated with Alternative 6, which is 17 acres less than the Proposed Project. Alternative 6 would permanently remove these walnut orchards from production. As with the Proposed Project, farmers may or may not replant an alternative crop within the ROW, which could lead to formerly productive agricultural land becoming permanently unusable. While implementation of

Mitigation Measure 4.2-4 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, it would not be reduced to a less than significant level. The permanent removal of 12 acres of walnut orchards would result in the conversion of Farmland. Therefore, permanent impacts to Farmland would be significant unmitigable (Class I).

Also similar to the Proposed Project, Alternative 6 could result in impacts to irrigation systems and/or ancillary farming systems that could result in the indirect conversion of Farmland to non-agricultural use. Implementation of Mitigation Measure 4.2-5 would reduce the impact of this potential conversion of Farmland to less than significant (Class II).

References – Agricultural Resources

- California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), 2008. *Table A-42, Tulare County 2004-2006 Land Use Conversion*. Available at: www.consrv.ca.gov/DLRP/fmmp/map_products/download_gis_data.htm. Accessed December 4, 2008.
- FMMP, 2006. Important Farmland Map—GIS Data. 2006.
- City of Farmersville, 2002. *Farmersville General Plan*. Adopted November 2002.
- City of Visalia, 1989. City of Visalia General Plan, Conservation, Open Space, Recreation and Parks Element. Adopted June 1989.
- City of Visalia, 1996. City of Visalia General Plan, Land Use Element. Adopted September 1991, Revised June 1996.
- City of Visalia, 2008. City of Visalia Zoning Ordinance Map, April 2008.
- Environmental Science Associates, 2009. ESA Staff site visit to Alternative 6 alignment, February 11, 2009.
- Purdue University, 2008. Center for New Crops & Plants Products, *Juglans regia* L. Available at: http://www.hort.purdue.edu/newcrop/duke_energy/Juglans_regia.html. Accessed December 8, 2008.
- SCE, 2008a. *Proponent's Environmental Assessment, San Joaquin Cross Valley Loop Project*. Filed May 30, 2008.
- SCE, 2008b. Response to Data Request #3, July 24, 2008.
- SCE, 2008c. Response to Data Request #5. November 26, 2008.
- Tulare County Agricultural Commissioner/Sealer, 2008. *2007 Tulare County Annual Crop and Livestock Report*. Published April 2008. Available at: <http://agcomm.co.tulare.ca.us/pdf/2007%20Crop%20Report.pdf>. Accessed on November 12, 2008.

Tulare County, 2001. *County of Tulare, General Plan Policy Summary*, December 2001.

Tulare County, 2007a. *Citrus Report: The Economic Impact of Citrus in Tulare County*. January 23, 2007. Available at:
<http://www.co.tulare.ca.us/civica/filebank/blobload.asp?BlobID=4152>. Accessed on December 8, 2008.

Tulare County, 2007b. General Plan Background Report. December 2007.

Tulare County, 2008. About Tulare County. Available at:
<http://www.co.tulare.ca.us/about/default.asp>. Accessed December 4, 2008.

Tulare County Resource Management Agency (RMA), 2009. 2008-2009 Williamson Act Subvention Report. Available at:
http://bosagendas.co.tulare.ca.us/MG299660/AS299663/AS299680/AI299816/DO299822/DO_299822.PDF. Accessed April 21, 2009.

United States Department of Agriculture (USDA), 2002. NASS 2002 Census of Agriculture County Profile, Tulare, California. Available at:
http://www.agcensus.usda.gov/Publications/2002/County_Profiles/California/cp06107.PDF. Accessed on November 12, 2008.

USDA, 2008a. Plants Database, *Citrus sinensis* (L.) Osbeck. Available at
<http://plants.usda.gov/java/charProfile?symbol=CISI>. Accessed December 8, 2008.

USDA, 2008b. Plants Database, *Juglans regia* L. English Walnut. Available at
<http://plants.usda.gov/java/charProfile?symbol=JURE80>. Accessed December 8, 2008.

USDA, 2008c. Background Information and Statistics: California's Citrus Industry. Available at
<http://www.ers.usda.gov/News/Cacitrus.htm>. Accessed December 8, 2008.

Visalia Times Delta, 2008. *Tulare County Agriculture: What grows where and why*. Available at:
<http://www.visaliatimesdelta.com/assets/pdf/J46042127.PDF>. Accessed December 8, 2008.

Washam, Michael, 2008. Planner, Tulare County Resource Management Agency (RMA).
Personal communication November 20, 2008.

World Agroforestry Centre, 2008. AgroForestry Tree Database, *Citrus sinensis*. Available at:
<http://www.worldagroforestrycentre.org/SEA/Products/AFDbases/AF/asp/SpeciesInfo.asp?SpID=537>. Accessed December 8, 2008.

4.3 Air Quality

This section evaluates the potential for the Proposed Project and alternatives to impact regional and local air quality from stationary and mobile sources of air emissions from construction activities, operational sources and maintenance activities. This section is based on a review of existing documentation of air quality conditions in the region, air quality regulations from the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the San Joaquin Valley Air Pollution Control District (SJVAPCD).

4.3.1 Setting

Air quality is a function of both the rate and location of pollutant emissions under meteorological conditions and topographic features that influence pollutant movement and dispersal.

Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affects air quality.

Regional Topography, Meteorology, and Climate

The potential for high pollutant concentrations developing at a given location depends upon the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the air pollutants. The atmospheric pollution potential, as the term is used in this EIR, is independent of the location of emission sources and is instead a function of factors such as topography and meteorology.

The study area, which includes the Proposed Project and alternatives, is located in the San Joaquin Valley, primarily in Tulare County, California. The study area also includes the Big Creek 3 Substation, which is located in northern Fresno County, in California. The study area is located at the base of the Sierra Nevada in the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley is shaped like a bowl, bound by the Sierra Nevada to the east, the Coastal Ranges to the west, and the Tehachapi mountains to the south. Air movement is generally restricted by the region's topographic features, thereby making the region highly susceptible to accumulation of air pollutants (SJVAPCD, 2002a).

Warm winters, cool summers, small daily and seasonal temperature ranges, and high relative humidity are characteristic of the area nearest the Pacific Ocean. With increasing distance east of the Coast Range, the maritime influence decreases. Areas that are well protected from the ocean, such as the study area, experience a more continental climate type with warmer summers, colder winters, greater daily and seasonal temperature ranges, and generally lower relative humidity.

The study area typically has average maximum and minimum winter (i.e., January) temperatures of 55.9 and 36.8 °F, respectively, while average summer (i.e., July) maximum and minimum temperatures are 97.7 and 63.3 °F, respectively. Precipitation in the City of Visalia averages approximately 10 inches of rainfall per year, with no snowfall (WRCC, 2008).

Existing Air Quality

SJVAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. Existing levels of air quality in the study area can generally be inferred from ambient air quality measurements conducted by SJVAPCD at its closest stations, the Visalia – North Church monitoring station located approximately three miles northeast of the Rector Substation.

Background ambient concentrations of pollutants are determined by pollutant emissions in a given area as well as wind patterns and meteorological conditions for that area. As a result, background concentrations can vary among different locations within an area. However, areas located close together and exposed to similar wind conditions can be expected to have similar background pollutant concentrations. Table 4.3-1 shows a five-year (2003 – 2007) summary of monitoring data collected at the Visalia monitoring station. The data are compared with the California Ambient Air Quality Standards (CAAQS) and the federal National Ambient Air Quality Standards (NAAQS).

Sensitive Receptors

Some sensitive receptors are people who are considered to be more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirmed are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

Regulatory Context

Air quality within the SJVAB is addressed through the efforts of various federal, State, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The air pollutants of concern and agencies primarily responsible for improving the air quality within the SJVAB and the pertinent regulations are discussed below.

Criteria Air Pollutants

Regulation of air pollution is achieved through both federal and State ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act, the USEPA has identified criteria pollutants and has established NAAQS to protect public health and welfare. NAAQS have been established for ozone (O₃), carbon

**TABLE 4.3-1
AIR QUALITY DATA SUMMARY (2003–2007) FOR THE STUDY AREA**

Pollutant	Standard	Monitoring Data by Year				
		2003	2004	2005	2006	2007
Ozone						
Highest One-Hour Average (ppm)		0.124	0.133	0.117	0.116	0.107
Days over State Standard	0.09	43	17	27	30	11
Highest Eight-Hour Average (ppm)		0.103	0.100	0.099	0.096	0.100
Days over State Standard	0.07	89	73	62	72	56
Days over Federal Standard	0.075	65	40	46	51	31
Nitrogen Dioxide						
Highest One-Hour Average (ppm)		0.087	0.078	0.069	0.063	0.071
Days over State Standard	0.18	0	0	0	0	0
Annual Average (ppm)		0.018	0.016	0.016	0.014	0.015
Carbon Monoxide						
Highest One-Hour Average (ppm)		4.7	3.7	3.8	NA	NA
Days over State Standard	20.0	0	0	0	NA	NA
Days over Federal Standard	35.0	0	0	0	NA	NA
Highest Eight-Hour Average (ppm)		3.03	2.24	2.61	NA	NA
Days over State Standard	9.0	0	0	0	NA	NA
Particulate Matter (PM10)						
Highest 24-Hour Average ($\mu\text{g}/\text{m}^3$) ^a		99.0	82.0	124.0	151.0	99.0
Days over State Standard ^b	50	107.9	90.7	146.3	156.3	91.5
Days over Federal Standard ^b	150	0	0	0	0	0
Annual Average ($\mu\text{g}/\text{m}^3$) ^a	20	43.0	41.4	44.5	47.4	42.4
Particulate Matter (PM2.5)						
Highest 24-Hour Average ($\mu\text{g}/\text{m}^3$) ^a		58.9	68.6	95.5	78.0	73.3
Days over Federal Standard ^b	35	30.9	NA	34.9	29.8	60.4

NOTES: NA = Data not available. ppm = parts per million; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

^a Concentrations and averages represent State statistics. State and federal statistics may differ because of different sampling methods.

^b Measurements are usually collected every six days. Days over the standard represent the estimated number of days that the standard would have been exceeded if sampling was conducted every day.

SOURCE: CARB, 2008a and USEPA, 2008.

monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM10 and PM2.5), and lead (Pb). These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the USEPA has set “primary” and “secondary” maximum ambient thresholds for each of the criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary

standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

The NAAQS are defined as the maximum acceptable concentration that may be reached, but not exceeded more than once per year. California has adopted more stringent ambient air quality standards for most of the criteria air pollutants. Table 4.3-2 presents both sets of ambient air quality standards (i.e., federal and State) and provides a brief discussion of the related health effects and principal sources for each pollutant. California has also established State ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants are not expected under the project and thus, there is no further mention of these pollutants in this EIR. The SJVAB is currently classified as severe non-attainment for the one-hour State ozone standard as well as non-attainment for the federal and State eight-hour ozone standards. Additionally, the SJVAB is classified as non-attainment for federal and State 24-hour PM₁₀ and PM_{2.5} standards (SJVAPCD, 2008a). The SJVAB is currently in attainment and/or unclassified status for CO, SO₂, and lead.

Ozone

Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_x). ROG and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours.

Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NO_x under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

Carbon Monoxide

Carbon monoxide is a non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

**TABLE 4.3-2
STATE AND FEDERAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS, AND SOURCES**

Pollutant	Averaging Time	State Standard	Federal Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	– 0.08 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases (ROGs) and nitrogen oxides (NOx) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9 ppm	Classified as a chemical asphyxiant, CO interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide	1 Hour Annual	0.18 ppm 0.030 ppm	– 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide	1 Hour 3 Hour 24 Hour Annual	0.25 ppm – 0.04 ppm –	– 0.5 ppm 0.14 ppm 0.03 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	24 Hour Annual	50 µg/m ³ 20 µg/m ³	150 µg/m ³ 50 µg/m ³	May irritate eyes and respiratory tract, cause decreases in lung capacity, increase cancer risk and increase mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Fine Particulate Matter (PM2.5)	24 Hour Annual	– 12 µg/m ³	35 µg/m ³ 15 µg/m ³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also, formed from photochemical reactions of other pollutants, including NOx, SO ₂ , and organics.
Lead	Monthly Quarterly	1.5 µg/m ³ –	– 1.5 µg/m ³	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

ppm = parts per million
µg/m³ = micrograms per cubic meter

SOURCE: CARB 2008b.

Particulate Matter

PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility.

Other Criteria Pollutants

Sulfur dioxide is a combustion product of sulfur or sulfur-containing fuels such as coal. SO₂ is also a precursor to the formation of atmospheric sulfate and particulate matter (both PM10 and PM2.5) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead.

Greenhouse Gas Emissions and Climate Change

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, most agree that there is a direct link between increased emissions of GHGs and long term global temperature increases. What GHGs have in common is that they allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation which warms the air. The process is similar to the effect greenhouses have in raising the internal temperature, hence the name GHGs. Both natural processes and human activities emit GHGs. The accumulation of GHGs in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity production and the use of motor vehicles have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has contributed to an increase in the temperature of the earth's atmosphere and has contributed to global climate change.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H₂O). CO₂ is the most common reference gas for climate change. To account for the warming potential of greenhouse gases, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). Large emission sources are reported in million metric tons of CO₂e (MMTCO₂e).

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2008d). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

The California Energy Commission (CEC) estimated that in 2004, California produced 492 million gross metric tons of CO₂e emissions (CEC, 2006). The CEC found that transportation is the source of 41 percent of the State's GHG emissions; followed by electricity generation at 22 percent and industrial sources at 21 percent.

Regulatory Setting

Federal

USEPA is responsible for implementing the myriad programs established under the federal Clean Air Act, such as establishing and reviewing the NAAQS and judging the adequacy of State Implementation Plans (SIPs), but has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

As discussed previously, the federal Clean Air Act requires the USEPA to define NAAQS to protect public health and welfare. The federal Clean Air Act does not specifically regulate GHG emissions; however, the U.S. Supreme Court has determined that GHGs are pollutants that can be regulated under the federal Clean Air Act. At the time of this writing, no federal regulations establish ambient air quality emissions standards for GHGs.

State

CARB is responsible for establishing and reviewing the State standards, compiling the California SIP and securing approval of the SIP from the USEPA, conducting research and planning, and identifying toxic air contaminants. CARB also regulates mobile sources of emissions in

California, such as construction equipment, trucks, and automobiles, and oversees the activities of California's air quality management districts, which are organized at the county or regional level. County or regional air quality management districts are primarily responsible for regulating stationary sources at industrial and commercial facilities within their geographic areas. These districts are also responsible for preparing the air quality plans that are required under the federal Clean Air Act and California Clean Air Act.

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 – California Global Warming Solutions Act

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, was enacted as legislation in 2006 and requires CARB to establish a statewide GHG emission cap for 2020 based on 1990 emission levels. AB 32 requires CARB to adopt regulations by January 1, 2008, that will identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program that will be developed. Under AB 32, CARB is also required to adopt, by January 1, 2008, a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. By January 1, 2011, CARB is required to adopt rules and regulations (which shall become operative January 1, 2012), to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 permits the use of market-based compliance mechanisms to achieve those reductions. AB 32 also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

In June 2007, CARB directed staff to pursue 37 early actions for reducing GHG emissions under AB 32. The broad spectrum of strategies to be developed – including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate GHG reductions, and green ports – reflects that the serious threat of climate change requires action as soon as possible (CARB, 2007a).

In addition to approving the 37 GHG reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. The general sentiment of CARB suggested a desire to try to pursue greater GHG emissions reductions in California in the near-term. Following the June 2007 CARB hearing, CARB staff evaluated all 48 recommendations submitted by stakeholders and several internally-generated staff ideas and published the *Expanded List of Early Action Measures To Reduce*

Greenhouse Gas Emissions In California Recommended For Board Consideration in October 2007 (CARB, 2007b).

Climate Change Proposed Scoping Plan

In October of 2008, CARB released a Proposed Scoping Plan outlining the State's strategy to achieve the 2020 GHG emissions limit (CARB, 2008d). This Proposed Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It will be presented to the Board for approval at its meeting in December 2008. The measures in the Scoping Plan approved by the Board will be developed over the next two years and be in place by 2012.

The Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan. These measures are presented in Table 4.3-3 below.

The following recommended actions are directly related to the Proposed Project:

(T-7) Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency)—Discrete Early Action. “This measure would require existing trucks/trailers to be retrofitted with the best available technology and/or CARB approved technology. This measure has been identified as a Discrete Early Action, which means it must be enforceable starting in 2010. Technologies that reduce GHG emissions and improve the fuel efficiency of trucks may include devices that reduce aerodynamic drag and rolling resistance. The requirements would apply to California and out-of-state registered trucks that travel to California. The cost of these retrofits would be recovered over the life of the vehicle through reduced fuel use. This measure would require in-use trucks and trailers to comply through a phase-in schedule starting in 2010 and achieve 100 percent compliance by 2014. Additionally, new 2011 and later tractors and trailers that are sold in or service California would need to be certified for aerodynamic efficiency requirements. The 2020 estimated GHG reductions could be up to 6.4 MMTCO₂e nationwide, of which about 0.93 MMTCO₂e or about 15 percent would occur within California. The Board will consider this regulation in December 2008.”

(H-6) High GWP Reductions from Stationary Sources – SF₆ Leak Reduction and Recycling in Electrical Applications. “This measure will reduce emissions of SF₆ within the electric utility sector and at particle accelerators by requiring the use of best achievable control technology for the detection and repair of leaks, and the recycling of SF₆... This measure would establish a regulation mandating a performance standard. Utilities and other affected entities would comply by using leak detection and repair (LDAR) abatement equipment to reduce system leakage. The proposed performance standard would mandate and enhance current voluntary federal SF₆ recycling standards. Voluntary industry practices have established an 80 percent SF₆ recovery rate, based on perceived economic efficiencies of recovery equipment. The proposed standard would increase recovery and recycling to 100 percent of the SF₆ contained in electrical and particle accelerator equipment without substantially increasing the industries' costs.” (CARB, 2008d)

**TABLE 4.3-3
RECOMMENDED ACTIONS OF CLIMATE CHANGE PROPOSED SCOPING PLAN**

ID #	Sector	Strategy Name
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)
T-3	Transportation	Regional Transportation-Related GHG Targets
T-4	Transportation	Vehicle Efficiency Measures
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)
T-6	Transportation	Goods-movement Efficiency Measures
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization
T-9	Transportation	High Speed Rail
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs ; More stringent Building and Appliance Standards
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000 GWh
E-3	Electricity and Natural Gas	Renewables Portfolio Standard
E-4	Electricity and Natural Gas	Million Solar Roofs
CR-1	Electricity and Natural Gas	Energy Efficiency
CR-2	Electricity and Natural Gas	Solar Water Heating
GB-1	Green Buildings	Green Buildings
W-1	Water	Water Use Efficiency
W-2	Water	Water Recycling
W-3	Water	Water System Energy Efficiency
W-4	Water	Reuse Urban Runoff
W-5	Water	Increase Renewable Energy Production
W-6	Water	Public Goods Charge (Water)
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission
I-4	Industry	Refinery Flare Recovery Process Improvements
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Recycling and Waste Management	Landfill Methane Control (Discrete Early Action)
RW-2	Recycling and Waste Management	Additional Reductions in Landfill Methane – Capture Improvements
RW-3	Recycling and Waste Management	High Recycling/Zero Waste
F-1	Forestry	Sustainable Forest Target
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)
H-2	High Global Warming Potential Gases	SF ₆ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)
H-3	High Global Warming Potential Gases	Reduction in Perfluorocarbons in Semiconductor Manufacturing (Discrete Early Action)
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases
A-1	Agriculture	Methane Capture at Large Dairies

SOURCE: CARB, 2008d.

In addition, the Plan identifies challenges to meeting future demand, including Building Transmission for Renewables and Modernizing Electricity Infrastructure. The Plan states:

“Population growth in hot areas and the need to reach remote renewable generation regions both require adding electricity transmission capability. Without new transmission lines, a 33 percent target for the Renewable Portfolio Standard (RPS) is unlikely to be met... Equally important to building transmission is modernizing the transmission and electricity distribution system. Advanced control, communications, and metering technologies, as well as improvements in control of both conventional and renewable generation, can create a more reliable, resilient grid.” (CARB, 2008d)

CARB Preliminary Draft Staff Proposal, October 2008

In its Staff Proposal, CARB is taking the first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

CARB’s staff has developed a preliminary interim threshold concept for industrial projects (CARB, 2008c). CARB staff’s objective in this proposal is to develop a threshold of significance that will result in the vast majority (~90 percent statewide) of the GHG emissions from new industrial projects that are subject to CEQA’s requirement to impose feasible mitigation. CARB believes this can be accomplished with a threshold that allows small projects to be considered less than significant. CARB staff used existing data for the industrial sector to derive a proposed hybrid threshold. The threshold consists of a quantitative threshold of 7,000 metric tons of CO₂e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. These performance standards have not yet been developed.

Local

San Joaquin Valley Air Pollution Control District

The Proposed Project and alternatives would be located within the jurisdiction of the SJVAPCD. The SJVAPCD regulates air pollutant emissions for all sources throughout the SJVAB other than motor vehicles. The SJVAPCD enforces regulations and administers permits governing stationary sources. The following rules and regulations would apply to the Proposed Project and alternatives:

Regulation VIII (Fugitive PM10 Prohibitions): Contains rules developed pursuant to USEPA guidance for Serious PM10 Nonattainment Areas. Rules included under this regulation limit fugitive PM10 emissions from the following sources: construction; demolition; excavation; extraction and other earth moving activities; bulk materials handling; carryout and track-out; open areas; paved and unpaved roads; unpaved vehicle/equipment traffic areas; and agricultural sources.

Rule 4102 (Nuisance): Prohibits the discharge of air contaminants or other materials in quantities that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public.

Rule 9510 (Indirect Source Review): Requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NO_x emissions and 45 percent below statewide average PM10 exhaust emissions. Also requires applicants to reduce baseline emissions of NO_x and PM10 emissions associated with operations by 33.3 percent and 50 percent respectively over a period of 10 years.

As required by the federal Clean Air Act and the California Clean Air Act, air basins or portions thereof have been classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the standards have been achieved. Jurisdictions of nonattainment areas are also required to prepare an air quality management plan (AQMP) that includes strategies for achieving attainment. The SJVAPCD’s most recent AQMP for ozone attainment is the *1-hour Extreme Ozone Attainment Demonstration Plan* which was adopted in October 2004 and amended in October 2005. The purpose of this plan is to set forth emission reduction goals and a timeline for attaining the federal one-hour ozone ambient air quality standards in the SJVAB by November 15, 2010.

In June 2007, the SJVAPCD published the *2007 PM10 Maintenance Plan and Request for Redesignation*. This plan demonstrates how PM10 attainment in the SJVAB will be maintained in the future.

In April 2008, The SJVAPCD Board adopted the *2008 PM2.5 Plan*. This plan was designed to attain the federal and State PM2.5 standards in the SJVAB as soon as possible.

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

Air quality issues are addressed in the Environmental Resources Management Element of the Tulare County General Plan. However, none of the policies outlined in this element would be applicable to the Proposed Project or alternatives (County of Tulare, 2001).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

Portions of the Proposed Project and alternatives would be located within the City of Visalia. The City of Visalia General Plan includes policies addressing air quality issues in its Conservation, Open Space, Recreation and Parks Element. The following policy would be applicable to the Proposed Project and alternatives:

Implementing Policy 1.3.4: Continue to mitigate short-term construction impacts and long-term stationary source impacts on a case-by-case basis as directed by the County Air Quality Attainment Plan.
(City of Visalia, 1989).

City of Farmersville General Plan (Proposed Project)

A portion of the Proposed Project would cross through the northern border of the City of Farmersville. While the Conservation, Open Space, Parks and Recreation Element of the City's General Plan includes a number of objectives and action plans to minimize air pollution, none of these plans would be applicable to the Proposed Project (City of Farmersville, 2002).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Big Creek 3 Substation portion of the Proposed Project and alternatives would be located in unincorporated Fresno County. The Fresno County General Plan includes policies addressing air quality issues in its Open Space and Conservation Element. The following goal and policy would be applicable to the Proposed Project and alternatives:

Goal OS-G: To improve air quality and minimize the adverse effects of air pollution in Fresno County.

Policy OS-G.2: The County shall ensure that air quality impacts identified during the CEQA review process are fairly and consistently mitigated. The County shall require projects to comply with the County's adopted air quality impact assessment and mitigation procedures.

Policy OS-G.13: The County shall require all access roads, driveways, and parking areas serving new commercial and industrial development to be constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use. (County of Fresno, 2000).

4.3.2 Significance Criteria

According to Appendix G of the CEQA Guidelines and the CPUC's interim approach to assessing GHG impacts, a project would result in a significant impact if it would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- d) Expose sensitive receptors to substantial pollutant concentrations; or
- e) Create objectionable odors affecting a substantial number of people.
- f) Conflict with the State goal of reducing GHG emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006.¹

¹ Appendix G of the CEQA Guidelines does not currently include a significance criterion for GHGs. Criterion f), above, was included here to provide a basis for evaluating the significance of the GHG emissions from the Proposed Project.

4.3.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE for reducing air quality impacts.

4.3.4 Impacts and Mitigation Measures

Approach to Analysis

This section presents an analysis of the potential air quality impacts associated with the construction, operation and maintenance of the Proposed Project. Emissions from construction equipment exhaust and generation of particulate matter (fugitive dust) are the primary concerns in evaluating short-term air quality impacts.

Proposed Project construction would employ a variety of construction and earth moving equipment. Motor-driven construction equipment, construction vehicles, and workers' vehicles would emit criteria pollutants from fuel combustion. Ground disturbing activities and heavy truck travel on paved roads would generate fugitive dust emissions. Construction of the Proposed Project, which would take up to one year to complete, has been estimated to generate the following quantity of uncontrolled criteria pollutant emissions:

- ROG: 1.2 tons
- CO: 5.1 tons
- NO_x: 12.2 tons
- SO₂: 0.02 tons
- PM10: 51.1 tons
- PM2.5: 11.1 tons

Projected construction emissions, detailed by activity, are presented in Table 4.3-4. Emission factors for construction equipment were derived using CARB's OFFROAD2007 emissions factor model. CARB's EMFAC2007 model was used to develop emission factors for on-road vehicles such as worker commuter vehicles, pickup trucks, and diesel semi-trucks. Onsite fugitive dust emissions were developed based on methods presented in the USEPA's AP-42 document as well as emission factors developed by CARB. Calculation sheets are provided in Appendix E, Air Quality.

Blasting may also be required during construction activities if rock is present. Areas where blasting would be utilized have not been determined; therefore, it is difficult to assess emissions that would result from blasting activities. Carbon monoxide is the primary pollutant emitted during blasting operations. Other pollutants emitted include particulates, NO_x, as well as small amounts of unburned hydrocarbons (USEPA, 1980). Given the expected limited use of blasting, the air pollutant emissions from that activity would not be likely to contribute materially to the construction emission totals shown above.

Long-term air pollutant emissions from the Proposed Project would be negligible since emission-related activities associated with Proposed Project operations and maintenance would be limited to periodic maintenance and inspection trips. It was estimated that annual emissions of all criteria pollutants during operations and maintenance would each be much less than one ton per year.

**TABLE 4.3-4
ESTIMATED PROPOSED PROJECT CONSTRUCTION EMISSIONS**

Activity	Emissions (pounds per activity)					
	ROG	CO	NO _x	SO _x	PM10	PM2.5
Survey						
Exhaust Emissions	1.0	30.3	4.1	0.0	0.4	0.4
Fugitive Dust Emissions	-	-	-	-	564.5	119.5
Material Staging Yard						
Exhaust Emissions	203.8	803.4	2050.0	2.9	70.8	65.1
Fugitive Dust Emissions	-	-	-	-	6237.5	1320.2
ROW Clearing						
Exhaust Emissions	34.0	131.6	319.5	0.5	11.9	10.9
Fugitive Dust Emissions	-	-	-	-	1411.6	295.7
Roads and Landing Work						
Exhaust Emissions	53.7	200.1	516.3	0.7	18.9	17.4
Fugitive Dust Emissions	-	-	-	-	2401.7	502.2
Guard Structure Installation						
Exhaust Emissions	35.1	135.1	324.6	0.5	12.7	11.7
Fugitive Dust Emissions	-	-	-	-	511.4	107.9
Remove Existing Conductor and OHGW						
Exhaust Emissions	37.2	151.7	404.0	0.6	13.4	12.3
Fugitive Dust Emissions	-	-	-	-	709.8	150.2
Remove Existing Towers						
Exhaust Emissions	58.2	225.5	454.6	0.5	26.3	24.2
Fugitive Dust Emissions	-	-	-	-	1167.3	245.3
Remove Existing Foundations						
Exhaust Emissions	32.3	115.4	302.8	0.5	10.5	9.7
Fugitive Dust Emissions	-	-	-	-	1135.0	238.4
Install Tower Foundations						
Exhaust Emissions	41.9	182.3	438.8	0.8	15.4	14.1
Fugitive Dust Emissions	-	-	-	-	1651.2	348.6
Tower Steel Haul						
Exhaust Emissions	8.9	35.4	96.7	0.1	3.1	2.9
Fugitive Dust Emissions	-	-	-	-	748.0	157.4
Tower Steel Assembly						
Exhaust Emissions	171.5	714.2	1229.3	1.5	83.2	76.6
Fugitive Dust Emissions	-	-	-	-	3768.2	794.9
Tower Erection						
Exhaust Emissions	31.2	130.7	229.8	0.3	14.9	13.7
Fugitive Dust Emissions	-	-	-	-	917.4	193.3
Install Tubular Pole Foundations						
Exhaust Emissions	148.6	650.9	1657.4	3.1	59.1	54.4
Fugitive Dust Emissions	-	-	-	-	8827.9	1860.6
Tubular Pole Haul						
Exhaust Emissions	30.3	126.8	308.1	0.4	10.8	10.0
Fugitive Dust Emissions	-	-	-	-	2604.1	547.2
Tubular Pole Assembly						
Exhaust Emissions	81.5	367.4	678.9	0.9	34.3	31.6
Fugitive Dust Emissions	-	-	-	-	7368.2	1543.7
Tubular Pole Erection						
Exhaust Emissions	81.5	367.4	678.9	0.9	34.3	31.6
Fugitive Dust Emissions	-	-	-	-	7368.2	1543.7

**TABLE 4.3-4 (Continued)
ESTIMATED PROPOSED PROJECT CONSTRUCTION EMISSIONS**

Activity	Emissions (pounds per activity)					
	ROG	CO	NO _x	SO _x	PM10	PM2.5
Install Conductor and OPGW						
Exhaust Emissions	961.7	3967.5	10151.8	15.0	344.1	316.7
Fugitive Dust Emissions	-	-	-	-	36417.9	7677.9
Guard Structure Removal						
Exhaust Emissions	17.6	76.2	159.0	0.2	7.9	7.3
Fugitive Dust Emissions	-	-	-	-	723.0	152.7
Rector Substation Modifications						
Exhaust Emissions	305.1	1286.1	3337.0	5.0	115.8	106.5
Fugitive Dust Emissions	-	-	-	-	12461.6	2631.0
Big Creek 3 Substation Modifications						
Exhaust Emissions	6.3	28.2	64.7	0.1	2.4	2.2
Fugitive Dust Emissions	-	-	-	-	462.0	97.4
Springville Substation Modifications						
Exhaust Emissions	4.9	23.4	51.1	0.1	1.9	1.7
Fugitive Dust Emissions	-	-	-	-	404.1	85.2
Vestal Substation Modifications						
Exhaust Emissions	4.9	23.4	51.1	0.1	1.9	1.7
Fugitive Dust Emissions	-	-	-	-	404.1	85.2
Restoration						
Exhaust Emissions	96.7	350.9	921.0	1.3	33.5	30.9
Fugitive Dust Emissions	-	-	-	-	2945.5	616.1
Total Project Emissions (tons)	1.2	5.1	12.2	0.02	51.1	11.1

a) Conflict with or obstruct implementation of the applicable air quality plan.

Construction, operation, and maintenance of the Proposed Project would result in emissions of criteria pollutants including ozone precursors such as ROG and NO_x as well as particulate matter. The SJVAPCD's *1-hour Extreme Ozone Attainment Demonstration Plan, 2007 PM10 Maintenance Plan and Request for Redesignation*, and the *2008 PM2.5 Plan* outline a number of control strategies to help the SJVAPCD reach attainment for the federal one-hour ozone standard, the 24-hour PM10 standard, and the federal and State PM2.5 standards, respectively. The SJVAB is in attainment for CO, SO₂, and lead, so there are no attainment plans for those pollutants.

Control measures outlined in the ozone plan focus primarily on control of stationary sources and indirect sources such as housing and commercial developments that may generate substantial vehicle trips during operations. The primarily source of criteria pollutant emissions generated by the Proposed Project would be associated with construction activities; operation of the Proposed Project would generate a very small number of vehicle trips required to inspect and maintain the proposed transmission line. Therefore, the Proposed Project would not create a permanent substantial source of ozone precursor emissions, and would not obstruct implementation of the SJVAPCD's ozone attainment plan (No Impact).

The PM10 maintenance plan focuses on how the SJVAPCD will maintain attainment of the federal 24-hour PM10 standard, which includes continued implementation of the *Amended 2003 PM10 Plan*. The 2003 plan focuses on implementing rules that limit PM10 emissions from various industrial sources as well as fugitive dust emissions. It is required by regulation that construction of the Proposed Project would be conducted in compliance with SJVAPCD's Regulation VIII, Fugitive PM10 Prohibitions; therefore, the Proposed Project would not obstruct implementation of the PM10 maintenance plan. Inspection and maintenance activities associated with operation would generate PM10 emissions from travel on unpaved roads; however, these activities would also be subject to rules set forth in Regulation VIII. Therefore, the Proposed Project would be regulated by applicable SJVAPCD rules and would not obstruct implementation of the PM10 maintenance plan (No Impact).

The *2008 PM2.5 Plan* is the SJVAPCD's first plan to focus specifically on PM2.5, although the control strategies from previous PM10 plans (particularly those related to fugitive dust control) have already improved the SJVAB's ambient PM2.5 levels. Therefore, because fugitive dust controls continue to be addressed in the PM10 plan, the *2008 PM2.5 Plan* contains a comprehensive list of strict regulatory and incentive-based measures to reduce directly-emitted PM2.5 and precursor emissions. However, the Proposed Project would result in relatively negligible PM2.5 emissions from those types of sources (see Table 4.3-4, below), with the vast majority of PM2.5 emissions associated with the Proposed Project arising from the PM2.5 component of fugitive dust. Nevertheless, the Proposed Project would be regulated by applicable SJVAPCD rules which would ensure compliance with the *2008 PM2.5 Plan*, and therefore would not obstruct implementation of the PM2.5 plan (No Impact).

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact 4.3-1: Construction activities could generate emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. Less than significant with mitigation (Class II)

The SJVAPCD has identified PM10 as the pollutant of greatest concern for construction related emissions. In the *Guide for Assessing and Mitigating Air Quality Impacts*, the SJVAPCD recommends that construction PM10 impacts be evaluated based on implementation of effective and comprehensive dust control measures rather than detailed quantification (SJVAPCD, 2002b). SJVAPCD has not established a CEQA significance threshold for PM10 or PM2.5 emissions associated with construction activities.

The SJVAPCD has also not established quantitative CEQA thresholds for ozone precursors associated with construction activities. In lieu of CEQA significance thresholds for construction emissions of ozone precursors, projected emissions of the Proposed Project are compared to the SJVAPCD's operational CEQA threshold of 10 tons per year for both NO_x and ROG.

Construction of the Proposed Project would take approximately one year to complete; therefore, total estimated emissions for all construction activities were used to represent annual emissions. The total estimated emissions associated with construction of each component of the Proposed Project are presented in Table 4.3-4. Exhaust emissions include heavy duty equipment exhaust, on-road truck emissions, and worker vehicle emissions. Fugitive dust emissions include emissions associated with travel on paved and unpaved roads as well as emissions associated with grading and earth disturbing activities. Refer to Appendix E for detailed calculation sheets.

As shown in Table 4.3-4, estimated construction emissions of NO_x would exceed the annual SJVAPCD CEQA threshold of 10 tons per year. Therefore, construction emissions would have the potential to contribute substantially to existing violations of ozone standards and impacts would be potentially significant. These emission rates do not include emissions from blasting activities; however, blasting activities are not anticipated to generate substantial emissions of criteria pollutants in relation to the emissions from the other construction sources. In addition, Mitigation Measure 4.7 (see Section 4.7, *Hazards and Hazardous Materials*) requires implementation of a Blasting Safety Plan, which would require dust control measures, including matting or covering of the blast area.

The Proposed Project would be subject to SJVAPCD's Rule 9510, Indirect Source Review (SJVAPCD, 2008b). This rule requires that project applicants reduce exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NO_x emissions and 45 percent below statewide average PM10 emissions. This may be achieved through on-site reductions such as utilizing add-on controls, cleaner fuels, newer low emitting equipment, or by purchasing off-site credits from the SJVAPCD (SJVAPCD, 2005). With implementation of this rule, construction emissions associated with the Proposed Project would be below the CEQA significance threshold for NO_x. Mitigation Measure 4.3-1a would require SCE to submit an Air Impact Assessment application to the SJVAPCD for review under Rule 9510, which would show how construction NO_x emissions would be reduced to less than 10 tons per year. With implementation of this measure, impacts to ozone attainment from emissions of ozone precursors during construction would be less than significant.

Mitigation Measure 4.3-1a: SCE shall submit an Air Impact Assessment application to the SJVAPCD that demonstrates how exhaust emissions from construction equipment greater than 50 horsepower shall be reduced by at least 20 percent from the statewide average NO_x emissions rate and 45 percent from the statewide average PM10 exhaust emission rate. The Air Impact Assessment shall also demonstrate that construction NO_x emissions associated with the project would be reduced to less than 10 tons per year. These reductions shall be achieved through any combination of on-site reduction measures (e.g., utilizing add-on controls, cleaner fuels or newer lower emitting equipment) and off-site reduction fees paid directly to the SJVAPCD. SCE shall provide a copy of the approved application to the CPUC prior to commencement of construction activities.

As discussed previously, the SJVAPCD has not developed quantitative thresholds for evaluating impacts of PM10 or PM2.5 emissions, but instead emphasizes the implementation of effective dust control measures to mitigate PM10 impacts. Because most of the PM2.5 emissions that would be associated with the Proposed Project would be from fugitive dust, effective dust control

measures would also mitigate PM_{2.5} impacts. Implementation of Mitigation Measure 4.3-1b would require SCE to implement dust control measures recommended by SJVAPCD, and would reduce impacts from PM₁₀ and PM_{2.5} emissions associated with construction to less than significant.

Regarding construction emissions of CO and SO₂, the SJVAPCD has not developed quantitative thresholds for these pollutants either. However, Proposed Project construction related emissions of these pollutants would not contribute substantially to a new violation because these the ambient levels for these pollutants in the study area are well below State and Federal ambient air quality standards, and the emission of CO and SO₂ from construction of the Proposed Project would be negligible and of short duration.

Mitigation Measure 4.3-1b: During construction, SCE and/or its contractors shall implement the following dust control measures.

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.)(Use of blower devices is expressly forbidden).*
- Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Limit traffic speed on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Install windbreaks at windward side(s) of construction areas.

- Suspend excavation and grading activity when winds exceed 20 mph.
- Limit area subject to excavation, grading, and other construction activity at any one time.

Significance after Mitigation: Less than Significant.

Impact 4.3-2: Operation of the Proposed Project could generate exhaust emissions of criteria pollutants from routine inspection and maintenance of transmission facilities. *Less than significant (Class III)*

Emissions of criteria pollutants associated with operation of the Proposed Project would be generated as a result of maintenance and inspection activities. Normal maintenance and inspection activities would include annual aerial and/or ground inspections of transmission facilities as well as inspection of spur and access roads. Furthermore, access and spur roads would be maintained and repaired in a manner consistent with SCE's road maintenance and repair practices. Exhaust emissions from these activities would not be expected to exceed a rate of one ton per year of ROG and NO_x, and would therefore be well below the SJVAPCD CEQA significance threshold of 10 tons per year. Exhaust emissions of PM_{2.5}, CO, and SO₂ would be negligible for ongoing operations of the Proposed Project. Therefore, impacts would be less than significant.

Mitigation: None required.

Impact 4.3-3: The Proposed Project could result in permanently disturbed land that would serve as a source of fugitive dust emissions. *Less than significant with mitigation (Class II)*

The Proposed Project would permanently disturb 42 acres of land and would require permanent removal of approximately 2,900 trees. This increase in open exposed land would lead to increased fugitive dust emissions. SJVAPCD Rule 8501 requires that property owners of any open area three acres or larger in size with at least 1,000 square feet of disturbed surface area implement appropriate control measures (SJVAPCD, 2004). Furthermore, unauthorized access on new access and spur roads could generate substantial quantities of fugitive PM₁₀ and PM_{2.5}. However, as stated in Chapter 2, *Project Description*, gates would be installed where required at fenced property lines to restrict unauthorized vehicular access. Mitigation Measure 4.3-3 includes measures recommended by the SJVAPCD to help mitigate fugitive PM₁₀ and PM_{2.5} emissions from open areas. Implementation of this measure would reduce impacts to less than significant.

Mitigation Measure 4.3-3: After construction, SCE shall, in perpetuity, utilize the following control measures to reduce fugitive PM₁₀ and PM_{2.5} emissions from permanently disturbed land and new access and spur roads:

- Apply and maintain water or dust suppressants to all un-vegetated areas; or
- Establish native vegetation that is compliant with SCE line clearance requirements on all previously disturbed areas; or
- Apply and maintain gravel or apply and maintain chemical/organic stabilizers/suppressants to all open areas.

Significance after Mitigation: Less than Significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Impact 4.3-4: Construction emissions associated with the Proposed Project could result in emissions of ozone precursors that would be cumulatively considerable. *Less than significant with mitigation (Class II)*

The SJVAB is non-attainment of ozone standards because of cumulative emissions from numerous sources throughout the SJVAB as well as transport of pollutants from regions outside of the SJVAB. Most sources emit ROG and NO_x in quantities that are too small to have a measurable effect on ambient ozone concentrations by themselves; however, when they are considered in a cumulative sense these emissions result in severe problems to the ambient air quality throughout the SJVAB. In response to this issue, the SJVAPCD has developed an annual emissions threshold of 10 tons for both ROG and NO_x to limit the individual contribution of discrete projects, thereby reducing the cumulative impacts of many smaller scale projects. As discussed previously, unmitigated emissions during construction would be below the threshold of 10 tons per year for ROG but would exceed it for NO_x, and would therefore contribute to a cumulatively considerable net increase in ozone precursor emissions. However, Mitigation Measure 4.3-1a would reduce impacts associated with NO_x emissions to less than significant, thereby reducing the Proposed Project's contribution to cumulative ozone levels. Therefore, the Proposed Project would not be cumulatively considerable and cumulative impacts would be less than significant with mitigation.

Mitigation Measure 4.3-4: Implement Mitigation Measure 4.3-1a.

Significance after Mitigation: Less than Significant.

Impact 4.3-5: Construction emissions associated with the Proposed Project could result in emissions of particulate matter that would be cumulatively considerable. *Less than significant with mitigation* (Class II)

PM10 and PM2.5 have a similar cumulative regional emphasis because particles can be entrained into the atmosphere and contribute to unhealthful levels over time. However, at a local scale PM10 and PM2.5 also have the potential to cause significant impacts if several grading or earth moving projects are underway simultaneously at nearby sites. As discussed in Section 3.6, *Cumulative Projects*, there are a number of projects that are proposed within one mile of the Proposed Project. These projects include road widening and resurfacing projects as well as community development projects such as residential subdivisions. If grading and earth moving activities associated with these projects would overlap with activities associated with construction of the Proposed Project, cumulative local impacts to PM10 and PM2.5 levels would be potentially significant.

The SJVAPCD recommends that if it appears that the local cumulative PM10 impacts would be significant, the Lead Agency should require the project applicant to implement enhanced dust control measures. For the purposes of this review, this approach to defining the significance of cumulative PM10 impacts is also applicable for emissions of PM2.5. Enhanced dust control measures include limiting traffic speeds on unpaved roads to 15 miles per hour and installing sandbags and other erosion control measures to prevent silt runoff to public roadways from sites with slopes greater than one percent. These measures have been included as part of Mitigation Measure 4.3-1b; therefore, the Proposed Project's contribution to a cumulative impact would not be cumulatively considerable.

Mitigation Measure 4.3-5: Implement Mitigation Measure 4.3-1b.

Significance after Mitigation: Less than Significant.

Impact 4.3-6: Operation and maintenance of the Proposed Project could generate emissions of criteria pollutants that would be cumulatively considerable. *Less than significant* (Class III)

As discussed previously, operation of the Proposed Project would generate much less than one ton of exhaust emissions per year for each criteria pollutant. These emissions would not exceed the annual threshold for ozone precursors set by the SJVAPCD for individual projects. Since the thresholds of 10 tons per year of ROG and NO_x were set by the SJVAPCD to reduce each project's individual contribution to cumulative air quality impacts, if a project does not exceed these thresholds its individual contribution would be less than significant. Therefore, when added to impacts from operation and maintenance of other projects in the SJVAB, the Proposed Project's incremental contribution to ozone precursor emissions would be less than cumulatively considerable. Operational exhaust emissions of PM2.5, CO, and SO₂ would be negligible and would also be less than cumulatively considerable.

As discussed previously, the SJVAPCD recommends that a project's cumulative contribution to PM10 emissions be evaluated based on the potential for earth disturbing activities associated with the project to overlap with earth disturbing activities associated with other nearby projects. If it appears that the level of activity may cause an adverse impact, then appropriate dust control measures should be implemented. The only earth disturbing activity associated with operation of the Proposed Project would result from travel on unpaved roads during inspection activities and occasional re-grading of roads during routine maintenance activities. Since these activities would occur along a line and would not remain in the same location for an extended period of time, it is unlikely that they would cause an adverse impact when considered with other earth disturbing activities in the area. Therefore, implementation of the Proposed Project would not result in a cumulative considerable impact to PM10 levels. Furthermore, implementation of Mitigation Measure 4.3-3 would reduce fugitive PM10 emissions from operation and maintenance activities, thereby further decreasing the Proposed Project's individual contribution to PM10 levels.

Mitigation: None required.

d) Expose sensitive receptors to substantial pollutant concentrations.

Impact 4.3-7: Construction activities could generate emissions of criteria pollutants, potentially exposing sensitive receptors to harmful pollutant concentrations. *Less than significant with mitigation (Class II)*

There are several homes located along the first 1.1 miles of the Proposed Project alignment near SCE's existing ROW. Additionally, new ROW that would be acquired for the Proposed Project would also pass within close proximity to a few rural residential receptors and schools. As discussed previously, construction activities would generate emissions of criteria pollutants, including suspended and inhalable particulate matter as well as equipment exhaust emissions. However, due to the linear nature of transmission facilities, construction activities would not remain in the same place for longer than a few days at a time, thereby reducing the amount of time that any one receptor would be exposed to elevated concentrations of air pollutants. Furthermore, Mitigation Measure 4.3-1a would reduce impacts from construction exhaust emissions while Mitigation Measure 4.3-1b would reduce impacts from construction-related dust. With implementation of these measures, impacts to sensitive receptors would be less than significant.

Mitigation Measure 4.3-7: Implement Mitigation Measures 4.3-1a and 4.3-1b.

Significance after Mitigation: Less than Significant.

e) Create objectionable odors affecting a substantial number of people.

Construction and operations of the Proposed Project would not create odorous emissions that would affect a substantial number of people; therefore, no impact would occur (No Impact).

f) Conflict with the State goal of reducing GHG emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006.

Impact 4.3-8: The Proposed Project would generate short-term and long-term emissions of GHGs. Less than significant with mitigation (Class II)

As with other individual small projects (e.g., projects that are not cement plants, oil refineries, electric generating facilities/providers, co-generation facilities, or hydrogen plants or other stationary combustion sources that emit more than 25,000 metric tons of CO₂e per year), the emissions increases that would result under the Proposed Project would not be expected to individually have a significant impact on global climate change (CAPCOA, 2008) and the primary concerns would be whether implementation of the Proposed Project would conflict with the State goals for reducing GHG emissions and whether it would have a cumulatively considerable impact on global climate change.

Based on a review of recent publications and actions from CARB and the Governor's Office of Planning and Research (OPR) technical advisory regarding analysis of GHGs in CEQA documents (CARB 2007a, and 2007c; OPR, 2008) two considerations were used to evaluate whether the Proposed Project's emissions could conflict with the State goals for reducing GHG emissions. Each is discussed in the analysis below. The considerations include:

1. The potential for the project to conflict with the 39 Recommended Actions identified by CARB in its Climate Change Proposed Scoping Plan which includes nine Early Action Measures; and
2. The relative size of the project's GHG emissions in comparison to CARB's proposed operational significance threshold of 7,000 metric tons per year.

The Proposed Project would generate GHG emissions from a variety of sources. Mobile sources such as trucks, tractors, and passenger vehicles would emit CO₂, CH₄ and N₂O, and circuit breakers may leak SF₆.

Table 4.3-3 presents the 39 Recommended Actions identified to date by CARB in its Climate Change Proposed Scoping Plan. Of the 39 measures identified, those that would be considered to be applicable to the Proposed Project would primarily be those actions related to transportation and SF₆ leakage. Consistency of the Proposed Project with these measures is evaluated by each source-type measure below:

(T-7) Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency)—Discrete Early Action. By the year 2014, 100 percent of California trucks and trailers, such as the ones that would be used to haul equipment and materials to construction sites associated with the Proposed Project, would be required to be retrofitted with the best available aerodynamic efficiency technology and/or CARB approved aerodynamic efficiency technology to reduce GHG emissions and improve fuel efficiency. The 100 percent compliance target date would occur after construction of the Proposed Project would be completed. Therefore, there would be no potential for the Proposed Project to conflict with this recommended action.

(H-6) High GWP Reductions from Stationary Sources – SF₆ Leak Reduction and Recycling in Electrical Application. SCE is a member of the SF₆ Reduction Partnership for Electric Power Systems. This partnership is a collaborative effort that was formed between the USEPA and the electric power industry to help identify and reduce fugitive emissions of SF₆. Utilities that have joined the partnership have agreed to: estimate current annual SF₆ emissions and annually inventory emissions of SF₆ using an emissions inventory protocol; establish a strategy for replacing older, leakier pieces of equipment; implement SF₆ recycling; ensure that only knowledgeable personnel handle SF₆; and submit annual progress reports to the USEPA. In 2006, the USEPA recognized SCE for its accomplishments in reducing SF₆ emissions. Since SCE joined the SF₆ Reduction Partnership for Electrical Power Systems in 2001, the company has reduced its SF₆ emissions by 41 percent. Consequently, SCE operations would be considered consistent with the goals of Action H-6.

In addition to assessing the Proposed Project's potential to conflict with the Recommended Actions, the Proposed Project should also be compared to CARB's proposed draft operational threshold of 7,000 metric tons per year. Construction of the Proposed Project would result in emissions of GHGs from onsite construction equipment exhaust as well as from off-site worker and delivery truck trip exhaust. The most common GHGs associated with fuel combustion include carbon dioxide (CO₂), nitrous oxide (N₂O) and methane (CH₄). Over the entire construction phase of the Proposed Project, approximately 1,633 metric tons of CO₂e would be emitted from on- and off-road combustion sources. This represents a short-term increase in SCE's baseline GHG emissions inventory. Refer to Appendix E for detailed calculation sheets.

Operation of the Proposed Project would generate GHG emissions from vehicle travel during inspection and maintenance of the new transmission lines. Annual GHG emissions from operations would be approximately 2.7 metric tons of CO₂e.

In addition to vehicle emissions, SF₆ could unintentionally leak from transformers, circuit breakers, and other equipment within the substations during operations of the Proposed Project. New sources of SF₆ included as part of the Proposed Project are four new circuit breakers that would be installed at the Rector Substation, each of which would contain approximately 242 pounds of SF₆. These new circuit breakers would replace two existing circuit breakers at the Rector Substation, each of which contains approximately 270 pounds of SF₆. The USEPA estimates that among leaking circuit breakers, those manufactured prior to 1999 leak, on average, 2.5 percent of the nameplate capacity, while leaking circuit breakers manufactured in 1999 and later emit less than one percent of nameplate capacity (USEPA, 2006).

SCE (SCE, 2009) reports that the two existing circuit breakers were manufactured in 1994 and, if not for this Proposed Project, they would likely not be replaced for another five to ten years. In order to determine the net change in SF₆ emissions as a result of the Proposed Project, this analysis makes the following assumptions:

- both old and new circuit breakers would leak, and would leak at the rates estimated by the USEPA; and
- without the Proposed Project, the old circuit breakers would be replaced in five years.

Given these assumptions, the anticipated annual emissions from the two old circuit breakers would be 13.5 pounds of SF₆ (139.6 metric tons of CO₂e), and the anticipated total annual emissions from the four new circuit breakers would be 9.68 pounds of SF₆ (101.1 metric tons of CO₂e). Consequently, by replacing older circuit breakers with more efficient models, the Proposed Project would result in a net decrease of approximately 3.82 pounds of SF₆ (38.5 metric tons CO₂e) per year. However, this net reduction would occur for only the first five years, after which it is assumed that the old breakers would need to be replaced anyway. So from year six through the life of the Proposed Project, there would be zero net reduction in SF₆. Total operational CO₂e emissions from the Proposed Project for the first five years would therefore be a net reduction of 35.8 metric tons (i.e., 2.7 metric tons from operations minus 38.5 metric tons from SF₆ leak reduction). From year six through the life of the project, total operational CO₂e emissions would be an increase of 2.7 metric tons.

To date, CARB has not given explicit instructions regarding thresholds for construction emissions. However, in December 2008, the South Coast Air Quality Management District (SCAQMD) adopted a methodology for determining whether or not GHG emissions from a project would be significant, which includes more guidance related to construction emissions (SCAQMD, 2008). Under this methodology, construction emissions are amortized over the life of a project (estimated to be 30 years), added to the operational emissions, and compared to the interim GHG significance threshold. In the absence of clear guidance from CARB regarding significance thresholds for construction emissions, the CPUC has determined that the SCAQMD's method is the best available method to determine GHG significance associated with the Proposed Project. Thus, the amortized annual emissions (i.e., 1/30 of the total construction emissions plus net operational emissions) would be as follows:

Years 1 through 5:	2.7 Operational emissions (metric tons CO ₂ e)
	54.4 Amortized construction emissions (metric tons CO ₂ e)
	<u>-38.5</u> Net decrease for circuit breakers (metric tons CO ₂ e)
	18.6 metric tons CO ₂ e
Years 6 through 30:	2.7 Operational emissions (metric tons CO ₂ e)
	54.4 Amortized construction emissions (metric tons CO ₂ e)
	<u>0.0</u> Net decrease for circuit breakers (metric tons CO ₂ e)
	57.1 metric tons CO ₂ e

While the annualized greenhouse gas emissions associated with the Proposed Project would be substantially less than CARB's preliminary draft threshold amount of 7,000 metric tons CO₂e, significance for this project is also based on whether the Proposed Project would be consistent with the State's greenhouse gas reduction goal under AB 32, which would require a minimum 30 percent reduction of greenhouse gases by 2020 compared to business as usual conditions. Early replacement of the older circuit breakers would make the Proposed Project consistent with the State's goal for years one through five, as the GHG reduction so achieved would be greater than 30 percent compared to business as usual (i.e., leaving the old breakers in place until they fail). However, from year 6 through the life of the project, the annualized GHG emissions of 57.1 metric tons CO₂e, while small, would not be less than business as usual. In order for the Proposed Project to be consistent with the State's GHG reduction goal beginning in year six, the following mitigation measure is required.

Mitigation Measure 4.3-8a: Within 60 days of completion of project construction, SCE shall enter into a binding agreement to purchase carbon offset credits from the California Climate Action Registry (CCAR), or any source that is approved by the CPUC and that is consistent with the policies and guidelines of the California Global Warming Solution Act of 2006 (AB 32), to offset a minimum of 30 percent of the net annualized increase of greenhouse gas emissions from the Proposed Project for year 6 through the life of the project. The offsets identified in the binding agreement shall be implemented no later than 60 calendar months from completion of construction. The estimated amount of offsets required is 17.1 metric tons CO₂e per year (i.e., 30 percent of 57.1 metric tons CO₂e). However, the exact amount of greenhouse gas emissions to be offset may vary depending on whether any of the construction plans are modified. Within 60 days of completion of the Proposed Project, SCE shall submit a report for the CPUC's review and approval, which shall identify all construction- and operations-related emissions and the offset amounts that will be purchased from approved programs to result in a minimum 30 percent net reduction in annualized GHG emissions.

In addition, the proposed removal of approximately 4,900 to 6,400 trees from orchards during construction could result in the generation of greenhouse gas emissions from tree disposal, depending on disposal methods. Disposing of orchard debris by incineration would release nearly all the sequestered carbon to the atmosphere as CO₂. Disposing of orchard debris via landfill would result in the formation and release of methane, a more potent GHG. Mitigation Measure 4.3-8b would reduce emissions from tree disposal by ensuring that 100 percent of wood waste would be diverted from landfills, and that the majority of wood waste is composted (Tulare County RMA, 2009; Akins, 2009). Implementation of Mitigation Measure 4.3-8b would reduce these impacts to less than significant.

Of the approximately 4,900 to 6,400 orchard trees that would be removed during project construction, approximately 2,000 to 3,500 would be replaced but approximately 2,900 trees would need to remain permanently removed. The proposed permanent removal of 2,900 trees may affect carbon sequestration in the project area. Trees extract CO₂ from the air and use the carbon to create biomass such as foliage, stems, branches, and roots. Concurrently, trees release carbon to the atmosphere from natural decay, vegetative respiration, consumption of biomass for food, and when set on fire. A tree's contribution to the carbon cycle is the net difference between

sequestration and release of carbon. Tree growth in orchards is generally well controlled by pruning, and after about ten years the amount of carbon sequestered annually by a tree may change very little (Kerckhoffs, 2007). There are currently no studies available which document the carbon sequestration rate for specific orchard tree species, so the reduction in sequestration caused by the permanent removal of 2,900 trees, and its significance with regard to the State's goal of reducing GHG emissions in California to 1990 levels by 2020, cannot be known. However, implementation of Mitigation Measure 4.3-8c would require that the permanent loss of orchard trees as a result of the Proposed Project would be fully offset thereby ensuring that the reduction in carbon sequestration would be less than significant.

Mitigation Measure 4.3-8b: During construction, SCE shall dispose of all removed trees and other green waste via the Tulare County's Wood and Green Waste Program. To ensure compliance with this program, SCE shall:

- collect all wood and green waste generated from the removal of orchard trees separately from other construction and demolition waste, and place wood and green waste in a separate recovery area;
- keep wood and green waste free of contaminants such as dirt, rock concrete, plastic, metal and other contaminants which can damage wood waste processing equipment, and reduce the quality of the compost; and
- prohibit the inclusion of yucca leaves, palm fronds or bamboo (which cannot be included in the salvage program) from the wood and green waste recovery area.

Mitigation Measure 4.3-8c: Prior to the conclusion of construction, SCE shall establish, fund, and implement a tree replacement program with the Urban Tree Foundation of Visalia, CA (or other comparable organization in Tulare County) for the replacement of all permanently removed orchard trees on a 1.5 to 1 basis. The tree replacement program shall provide for the Urban Tree Foundation to select the tree species and suitable locations for the plantings, and shall also provide for the maintenance of the plantings for a minimum of one full year to maximize survival rate. SCE shall provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings. (Note: it is the intent of this mitigation measure to offset the loss of carbon sequestration from the permanent loss of trees, not to replace the loss of a particular crop; therefore, it is not required that the replacement trees be orchard species.)

Significance after Mitigation: Less than Significant.

4.3.5 Cumulative Impacts

Cumulative impacts from emissions of criteria pollutants are discussed under c) above. As discussed under this item, emissions of ozone precursors, PM10, and PM2.5 during construction activities could result in a significant cumulative impact when considered with other projects being constructed in the SJVAB. However, implementation of Mitigation Measures 4.3-1a and 4.3-1b

would reduce the Proposed Project's individual contribution to cumulative air quality impacts from construction activities to a less than cumulatively considerable level (Class II). Because the SJVAB is designated as either attainment or unclassified related to the other criteria pollutants, Proposed Project construction emissions of these pollutants would not be cumulatively considerable and the associated cumulative impacts would be less than significant (Class III).

As also discussed under item c) above, ozone precursor, PM10, PM2.5, CO, and SO₂ emissions from operation and maintenance activities would be unlikely to contribute substantially to a cumulatively considerable impact. Therefore cumulative impacts associated with operation of the Proposed Project would be less than significant (Class III). Additionally, implementation of Mitigation Measure 4.3-3 would help ensure that impacts from operation and maintenance activities would be less than significant.

As discussed under item f) above, significance of GHG emissions are determined based on whether they would have a cumulatively considerable impact on global climate change. The Proposed Project would generate considerably less than 7,000 metric tons CO₂e per year, and, with mitigation, would not conflict with the State's GHG reduction goals. Indirect impacts to global climate change from tree removal and disposal could be cumulatively considerable when considered with tree removal from other reasonably foreseeable projects. However, with implementation of mitigation requiring SCE to dispose of trees via Tulare County's Wood and Green Waste Program and to fund and implement a tree replacement program, the Proposed Project's contribution to global climate change would not be cumulatively considerable (Class II).

4.2.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no air quality impacts would occur.

Alternative 2

Construction activities associated with Alternative 2 are anticipated to take approximately eight months longer than the Proposed Project due to the fact that Alternative 2 would require removal of 158 more single circuit lattice towers than the Proposed Project and would require installation of three more double circuit lattice towers and 47 more double circuit tubular poles. Construction of these additional structures would result in a greater amount of criteria pollutant emissions and GHG emissions. However, since construction activities associated with Alternative 2 would be spread over a longer time period, emissions in any one 12-month period would be approximately the same as those anticipated from the Proposed Project.

As with the Proposed Project, operation and maintenance of Alternative 2 would result in emissions of criteria pollutants and GHGs. Similarly to the Proposed Project, new transmission

lines constructed as part of Alternative 2 would have to be inspected and maintained on an annual basis. Alternative 2 would replace a greater length of existing line than the Proposed Project, and would require acquisition of less new ROW. Assuming that existing facilities are currently inspected and maintained annually and therefore constitute an existing source of criteria pollutant and GHG emissions, it can be assumed that operation and maintenance of Alternative 2 would result in a smaller net increase in emissions than the Proposed Project. Furthermore, with respect to GHG emissions, Alternative 2 would involve the same modifications to existing substations and would therefore replace older leakier circuit breakers with newer more efficient circuit breakers. Tree removal, resulting in a loss of carbon sequestration, would be generally the same as for the Proposed Project.

Criteria pollutant and GHG emissions from construction and operation of Alternative 2 would be generally comparable to those associated with the Proposed Project. Therefore, it can be concluded that impacts from Alternative 2 would be less than significant with implementation of Mitigation Measures 4.3-1a, 4.3-1b, 4.3-3, 4.3-4, 4.3-5, 4.3-7, 4.3-8a, 4.3-8b, and 4.3-8c (Class II).

Alternative 3

Construction activities associated with Alternative 3 are anticipated to take approximately 12 months longer than the Proposed Project due to the fact that Alternative 3 would require removal of 216 more single circuit lattice towers than the Proposed Project and installation of 45 more double circuit lattice towers and 40 more double circuit tubular poles. Construction of these additional structures would result in a greater amount of criteria pollutant emissions and GHG emissions. However, since construction activities associated with Alternative 3 would be spread over a longer time period, emissions in any one 12-month period would be approximately the same as those anticipated from the Proposed Project.

As with the Proposed Project, operation and maintenance of Alternative 3 would result in emissions of criteria pollutants and GHGs. Similarly to the Proposed Project, new transmission lines constructed as part of Alternative 3 would have to be inspected and maintained on an annual basis. Alternative 3 would replace a greater length of existing line than the Proposed Project, and would require acquisition of less new ROW. Assuming that existing facilities are currently inspected and maintained annually and therefore constitute an existing source of criteria pollutants and GHGs, it can be assumed that operation and maintenance of Alternative 3 would result in a smaller net increase in emissions than the Proposed Project. Furthermore, with respect to GHG emissions, Alternative 3 would involve the same modifications to existing substations and would therefore replace older leakier circuit breakers with newer more efficient circuit breakers. Tree removal, resulting in a loss of carbon sequestration, would be generally the same as for the Proposed Project.

Criteria pollutant and GHG emissions from construction and operation of Alternative 3 would be generally comparable to those associated with the Proposed Project. Therefore, it can be concluded

that impacts from Alternative 3 would be less than significant with implementation of Mitigation Measures 4.3-1a, 4.3-1b, 4.3-3, 4.3-4, 4.3-5, 4.3-7, 4.3-8a, 4.3-8b, and 4.3-8c (Class II).

Alternative 6

Construction activities associated with Alternative 6 are anticipated to take approximately four months longer than the Proposed Project due to the fact that Alternative 6 would require removal of more structures and would include installation of a greater number of new structures. Construction of these additional structures would result in a greater amount of criteria pollutant emissions and GHG emissions. However, since construction activities associated with Alternative 6 would be spread over a longer time period, emissions in any one 12-month period would be approximately the same as those anticipated from the Proposed Project.

As with the Proposed Project, operation and maintenance of Alternative 6 would result in emissions of criteria pollutants and GHGs. Similarly to the Proposed Project, new transmission lines constructed as part of Alternative 6 would have to be inspected and maintained on an annual basis. Alternative 6 would replace a greater length of existing line than the Proposed Project, and would require acquisition of less new ROW. Assuming that existing facilities are currently inspected and maintained annually and therefore constitute an existing source of criteria pollutants and GHGs, it can be assumed that operation and maintenance of Alternative 6 would result in a smaller net increase in emissions than the Proposed Project. Furthermore, with respect to GHG emissions, Alternative 6 would involve the same modifications to existing substations and would therefore replace older leakier circuit breakers with newer more efficient circuit breakers. Tree removal, resulting in a loss of carbon sequestration, would be generally the same as for the Proposed Project.

Criteria pollutant and GHG emissions from construction and operation of Alternative 6 would be generally comparable to those associated with the Proposed Project. Therefore, it can be concluded that impacts from Alternative 6 would be less than significant with implementation of Mitigation Measures 4.3-1a, 4.3-1b, 4.3-3, 4.3-4, 4.3-5, 4.3-7, 4.3-8a, 4.3-8b, and 4.3-8c (Class II).

References – Air Quality

Akins, Denise, 2009. Engineering Technician, Tulare County Resource Management Agency, Solid Waste Division. Personal communication May 5, 2009.

California Air Pollution Control Officers Association (CAPCOA), 2008. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.

California Air Resources Board (CARB), 2007a. *Draft List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration*. September 2007.

- CARB, 2007b. *Expanded List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration*. October 2007.
- CARB, 2007c. *Mandatory Reporting of California greenhouse gas Emissions*, Presentation at Cal/EPA Headquarters. August 14, 2007.
- CARB, 2008a. *Aerometric Data Analysis and Management* website (<http://www.arb.ca.gov/adam/welcome.html>) accessed July 21, 2008.
- CARB, 2008b. *Ambient Air Quality Standards*. Obtained online (<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>) July 21, 2008.
- CARB, 2008c. *Preliminary Draft Staff Proposal. Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*. Released October 24, 2008.
- CARB, 2008d. *Climate Change Proposed Scoping Plan: a framework for change*. California Air Resources Board (CARB). Released October, 2008. Retrieved from <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf>.
- California Energy Commission (CEC), 2006. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*. December 2006.
- City of Farmersville, 2002. *Farmersville General Plan, Part I, Chapter 4: Conservation, Open Space, Parks and Recreation Element*, adopted November 6, 2002.
- City of Visalia, 1989. *Visalia General Plan – Conservation, Open Space, Recreation and Parks Element*, June 1989.
- County of Fresno, 2000. *Fresno County General Plan—Open Space and Conservation Element*, October 2000.
- County of Tulare, 2001. *General Plan Policy Summary, Section 6 – Environmental Resources Management Element*. December 2001.
- Governor's Office of Planning and Research (OPR), 2008. CEQA AND CLIMATE CHANGE: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review. Sacramento, CA: OPR. Retrieved October 23, 2008, from <http://opr.ca.gov/index.php?a=ceqa/index.html>.
- Intergovernmental Panel on Climate Change (IPCC), 2001. *Climate Change 2001: Working Group I: The Scientific Basis, Section F.5, Table 4*; <http://www.grida.no/climate/ipcc%5Ftar/wg1/032.htm#f5>, accessed November 26, 2008.
- Kerckhoffs, L.H.J., and J.B. Reid, 2007. *Carbon sequestration in the standing biomass of orchard crops in New Zealand*. Horticulture New Zealand Ltd. Published March 26, 2007.
- San Joaquin Valley Air Pollution Control District (SJVAPCD), 2002a. *Guide for Assessing and Mitigating Air Quality Impacts: Technical Document*, updated January 10, 2002.
- SJVAPCD, 2002b. *Guide for Assessing and Mitigating Air Quality Impacts*, updated January 10, 2002.

- SJVAPCD, 2004. *Rule 8051, Open Areas*, adopted November 1, 2001, amended August 19, 2004.
- SJVAPCD, 2005. *Rule 9510, Indirect Source Review*, adopted December 15, 2005.
- SJVAPCD, 2008a. *Ambient Air Quality Standards and Valley Attainment Status*. Obtained online (<http://www.valleyair.org/aqinfo/attainment.htm>) on November 26, 2008.
- SJVAPCD, 2008b. Telephone conversation between Mark Montelongo (San Joaquin Air Pollution Control District) and Nichole Yeto (ESA), November 26, 2008.
- South Coast Air Quality Management District (SCAQMD), 2008. Board Meeting, December 5, 2008, Agenda No. 31. December 2008.
- Southern California Edison Company (SCE), 2009. Email communication from Susan Nelson of SCE to Jennifer Johnson of ESA, May 28, 2009.
- Tulare County RMA, 2009. Landfill Salvage Program, Wood and Green Waste Program. Available at: http://www.co.tulare.ca.us/government/solid_waste/landfill_salvage_program.asp. Accessed May 5, 2009.
- United States Environmental Protection Agency (USEPA), 1990. *AP-42, Chapter 13.3, Explosives Detonation*, February 1990.
- USEPA, 2006. SF6 Leak Rates from High Voltage Circuit Breakers – U.S. EPA Investigates Potential Greenhouse Gas Emissions Source. IEEE Power Engineering Society General Meeting, Montreal, Quebec, Canada, June 2006. Obtained online (http://www.epa.gov/electricpower-sf6/documents/leakrates_circuitbreakers.pdf).
- USEPA, 2008. *Air Quality Data*. Obtained online (http://www.epa.gov/aqspubl1/annual_summary.html) accessed November 26, 2008.
- Western Regional Climate Center (WRCC). 2008. *Period of Record Monthly Climate Summaries for Visalia, California*. Obtained online (<http://www.wrcc.dri.edu/summary/Climsmsca.html>) November 26, 2008.

4.4 Biological Resources

4.4.1 Setting

Introduction

This section describes the existing environment for wildlife, botanical, and wetland resources for the Proposed Project and alternatives. In addition to the alignments, the setting considers project staging areas, access roads, ancillary facilities and adjacent habitat that could reasonably be affected by project activities. This section identifies potential impacts to sensitive wetland and biological resources and proposes mitigation measures to reduce potential project impacts.

The setting information presented herein was compiled from available scientific literature and database searches, coordination with resource experts, in-house staff expertise, and multi-year field surveys. Sources include the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) (CDFG, 2009), the U.S. Fish and Wildlife Service (USFWS) Recovery Plan for Upland Species (Williams et al., 1998), the Proponent's Environmental Assessment (PEA) (Southern California Edison [SCE], 2008) and Stebbins (2008) Biological Resource Study Report that was prepared for the Proposed Project.

Field reconnaissance surveys were conducted for the Proposed Project and alternatives on July 9 and 10, 2008, and November 24 and 25, 2008, by ESA wildlife biologist Joe Henry and on February 11, 2009 and April 6 to 8, 2009, by ESA Certified Wildlife Biologist, Brian Pittman. These surveys were in addition to biological resource surveys performed by SCE and their contractors as identified in Stebbins (2008), which included aerial-reconnaissance surveys by helicopter in May 2006 and February 2007; and ground-based surveys from May 1 to June 10, 2005, April 20 to June 6, 2006, March 26 to 28, 2007, November 15 to 16, 2007, February 3 to 8, 2008, February 20 to 27, 2008, and from March 3 to 9, 2008.

Regional

The study area for the Proposed Project and alternatives is generally located in northwestern Tulare County and regionally within the central San Joaquin Valley and foothills of the Sierra Nevada Mountains. The study area is within the California Floristic Province, Great Valley Region and is within the San Joaquin Valley Subregion¹, which includes portions of the San Joaquin Valley floor in Tulare County that extend to the Sierra foothills (Hickman, 1993). Soils vary greatly in the study area, but the general soil classification includes relatively flat, moderately well-drained to well-drained, moderately deep loamy soils (U.S. Department of Agriculture, 2008). The elevation of the Proposed Project and alternatives varies from about 350 feet to more than 1,800 feet above mean sea level. Annual rainfall averages about 10.7 inches per year in the lower elevation portions

¹ Geographic subdivisions are used to describe and predict features of the natural landscape. The system of geographic units is four-tiered: provinces, regions, subregions, and districts. The State of California is covered by three floristic provinces: California Floristic Province, Great Basin, and Desert. The California Floristic Province is the largest, includes most of the State and small portions of Oregon, Nevada and Baja California, Mexico and is made up of six regions.

of the study area and increases to about 14.5 inches per year at higher elevations (e.g., near Lemon Cove) (DWR, 2009).

Natural Communities and Wildlife Habitat

The vegetation classification system used in this document is based, in part, on the classification systems of Holland (1986) and Mayer and Laudenslayer (1988). The first has been the standard classification system used for describing California's vegetation for a number of years. The second system uses broader groupings known as Wildlife Habitat Relationships types, which are useful when evaluating plant and animal resources simultaneously.

The study area supports a mix of habitats common to the San Joaquin Valley and foothills of the Sierra Nevada range of Tulare County. In general, the valley floor portions of the study area are dominated by agricultural lands with limited areas that support annual grasslands and vernal pool habitat. Foothill portions of the study area that are too steep for agricultural production are dominated by annual grasslands and oak woodlands, and to a smaller extent, riparian woodlands. A description of each of these communities and habitat types as they occur in the study area is presented below, and is displayed as Figure 4.4-1.

Agriculture/Disturbed

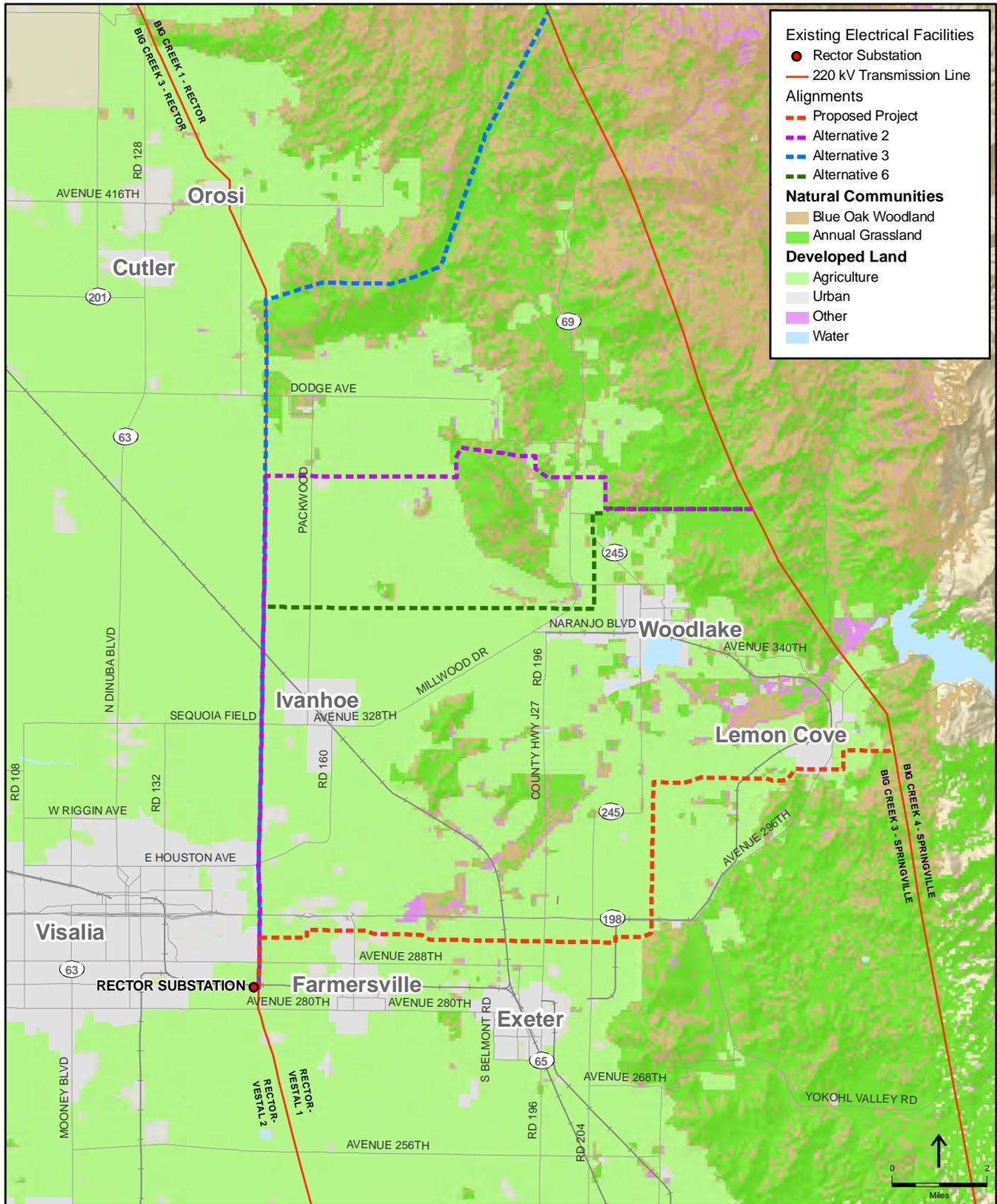
Agricultural lands, including orchards, vineyards, croplands and irrigated pasturelands comprise most of the available vegetation and wildlife habitat on the San Joaquin Valley floor in the study area. Management activities in these areas generally preclude the presence of natural vegetation and special status plant and wildlife species, though a few rare species like the San Joaquin kit fox (*Vulpes macrotis mutica*) and burrowing owl (*Athene cunicularia*) use agricultural lands if native habitat elements and food sources occur nearby.

Citrus and olives are the most widely planted agricultural crops in the study area, but other tree crops include walnuts and stone fruit (e.g., peaches, plums and others), among others. Irrigated pasturelands grazed for livestock also occur in the study area and are dominated by introduced invasive grasses and herbs including Dallisgrass (*Paspalum dilatatum*), perennial ryegrass (*Lolium perenne*), clover (*Trifolium* sp.) and filaree (*Erodium* sp.).

Agricultural lands are the dominant habitat type in the Proposed Project study area. Between the City of Visalia and Badger Hill, orchards and cropland dominate the alignment with less than five percent of the proposed right-of-way (ROW) being developed. Facility upgrades at the Springville, Vestal, Big Creek 3 and Rector Substation sites would consist of electrical system and safety upgrades within developed areas that do not support natural vegetation or wildlife values.

Alternatives 2 and 6 principally traverse orchards and croplands that provide minimal plant and wildlife habitat. Habitat distribution is shown in Figure 4.4-1.

Alternative 3 is dominated by agricultural lands from the Rector Substation to mile 14.6. Between mile 14.6 and the Big Creek-Springville line, the line is dominated by grazed annual grasslands (pasturelands) and blue oak woodlands, which are described below.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; CDF, 2002

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.4-1
Distribution of Habitats within the Study Area

Native vegetation elements are limited within cultivated and disturbed areas, though ruderal (disturbed) non-native grassland habitat elements sometimes persist on the fringes of these managed areas. Wildlife use varies depending on the type and intensity of farming activities, intensity of disturbance, and availability of nearby native habitat, with bird species that are adapted to human environments or prey on crops often present in the greatest numbers. Typical birds of these areas include European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), and house sparrow (*Passer domesticus*). Croplands are important foraging habitat for numerous raptors including red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*). In the study area, agricultural areas also provide important movement corridors for common and rare wildlife species such as coyote (*Canis latrans*), and less commonly the San Joaquin kit fox and burrowing owl, which are grasslands species that also use adjacent agricultural lands.

Annual Grassland

Annual grasslands in the study area include non-irrigated grazing lands and grasslands, as well as fallow agricultural lands. Grassland areas are generally limited to the easternmost portions of the Proposed Project and alternative alignments; however, grasslands also persist on the valley floor in small undeveloped parcels (e.g., the Stone Corral Ecological Reserve [Alternative 3] and areas near the Kaweah Oaks Preserve [Proposed Project]), between and within agricultural lands and in fallow fields.

Annual grasslands habitat makes up just a small part (less than five percent) of the Proposed Project alignment, occurring principally in the eastern portion of the alignment near the Big Creek-Springville lines. This habitat comprises about 10 percent of available habitat under Alternative 2 and Alternative 3, and about five percent or less for Alternative 6 (Figure 4.4-1). At relatively higher elevations in the eastern portion of Alternative 3, annual grassland mixes with and is eventually replaced in part by blue oak woodland.

Long-term cattle grazing has greatly influenced the dominant grasses and forb species that occur in the study area, which today tends toward non-native Mediterranean species with relatively few natives. Common dominant grasses in the study area include slender wild oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum jubatum*), and Italian ryegrass (*Lolium multiflorum*). Areas that have not been intensively grazed by cattle, particularly toward the foothills, additionally support numerous showy-flowered, native annual herbs and forbs, especially during years of favorable rainfall. Such plants include purple brodiaea (*Dichelostemma pulchella*), blow-wives (*Achyraea mollis*), bicolor lupine (*Lupinus bicolor*), popcorn flower (*Plagiobothrys nothofulvus*), lotus (*Lotus micranthus*), and blue-eyed gilia (*Gilia tricolor*) (Stebbins, 2008).

Wildlife species that are common to grasslands in the study area are those that are principally associated with the undeveloped Sierra foothills. Common amphibians and reptiles in the study area include western toad (*Bufo boreas*), pacific chorus frog (*Pseudacris regilla*), southern alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*) and Gilbert's skink (*Plestiodon gilberti*), Pacific gopher snake (*Pituophis catenifer catenifer*), Valley garter snake (*Thamnophis sirtalis fitchi*) and western rattlesnake (*Crotalus oreganus*). Where grasslands co-

occur with vernal pool habitat these areas may additionally support western spadefoot (*Spea hammondi*), which occurs in the eastern portion of Alternative 2 and 6 (B. Pittman, 2009), and California tiger salamander (*Ambystoma californiense*), which is present in grasslands in and near the Stone Corral Ecological Reserve (CDFG, 2009). Birds that breed, forage or otherwise reside in Sierra foothill grasslands include white-tailed kite (*Circus cyaneus*), red-tailed hawk, Brewer's blackbird (*Euphagus cyanocephalus*), western scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), western meadowlark (*Sturnella neglecta*), and mourning dove (*Zenaida macroura*), among many others. The burrowing owl is an uncommon resident of grasslands in the study area. Common mammal species in local annual grasslands include California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), Audubon's cottontail (*Spermophilus audubonii*) and black-tailed deer (*Odocoileus hemionus*).

Blue Oak Woodland

Blue oak woodland is a highly variable community dominated by blue oak (*Quercus douglasii*), but commonly includes other oak species such as interior live oak (*Q. wislizeni*) as well as foothill pine (*Pinus sabiniana*) and California buckeye (*Aesculus californica*). Within the regional area, stands vary from relatively open savanna with a grassy understory at lower elevations to fairly dense woodlands with a shrub dominated understory at higher elevations.

Blue oak woodland covers less than one percent of the Proposed Project alignment, occurring in small, scattered patches in the east portion of the alignment (Figure 4.4-1). Blue oak woodlands comprise a small portion (less than one percent) of Alternative 2 and 6. This habitat type is most pronounced in Alternative 3, which consists of about 10 to 20 percent of blue oak habitat, predominantly in the northeastern portion of the alignment east of the Big Creek-Rector lines.

Woodland and forest habitat provide food, cover, and nesting sites for many wildlife species. Bird species typically found in oak woodlands include acorn woodpecker (*Melanerpes formicivorus*), bushtit (*Psaltriparus minimus*), oak titmouse (*Baeolophus inornatus*), and hermit thrush (*Catharus guttatus*). Cavity nesting birds and many raptor species rely on oaks and woodland habitat for nesting sites.

Sensitive Plant Communities

Valley Oak Woodland

A remnant stand of valley oak woodland habitat persists in and near the Proposed Project alignment as a remnant of a much larger valley oak community that historically extended to the Kaweah Oaks Preserve. This area is generally located north of the Proposed Project and Highway 198 in the central portion of the alignment (Figure 4.4-1). Woodland and forest habitat provide food, cover, and nesting sites for many wildlife species.

Common wildlife species associated with this remnant oak woodland habitat include gopher snake, western fence lizard, American crow, American kestrel (*Falco sparverius*), American robin (*Turdus migratorius*), house finch (*Carpodacus mexicanus*), great-horned owl (*Bubo virginianus*), mourning dove, western scrub jay, and red-tailed hawk (Stebbins, 2008).

Valley Mixed Riparian Woodland

Valley mixed riparian woodlands occurs at a few locations in the study area along streams and drainages with permanent or intermittent water flows. In the Proposed Project alignment such habitat occurs in association with Deep Creek, Outside Creek and Yokohl Creek. Under Alternatives 2, 3, and 6, riparian woodlands occur at the St. Johns River, Kaweah River, multiple locations in Cottonwood Creek and a few maintained canals. This habitat type is also present in Rattlesnake Creek associated with Alternative 3.

Dominant canopy trees in these riparian woodlands include arroyo willow (*Salix lasiolepis*), California sycamore (*Plantanus racemosa*), Gooding's willow (*S. goodingii*), button-willow (*Cephalanthus occidentalis*) and Oregon ash (*Fraxinus latifolia*). Understory species include rush (*Juncus balticus*), seep monkey-flower (*Mimulus guttatus*), spikerush (*Heleocharis acicularis*), himalayan blackberry (*Rubus armeniacus*), blue elderberry (*Sambucus mexicanus*), wild grape (*Vitis californica*), and stinging nettle (*Urtica dioica holosericea*) (Stebbins, 2008).

Riparian woodlands are extremely productive and important wildlife areas. These areas provide abundant food, cover and breeding sites for native wildlife and often serve as important wildlife nursery sites and movement corridors. Because they are often undeveloped, riparian corridors provide regional connectivity between otherwise disconnected natural habitat and such woodlands generally support a diverse assemblage of plant and wildlife species. Characteristic bird species in this habitat include great blue heron (*Ardea herodias*), great egret (*Ardea alba*), red-winged blackbird (*Agelaius phoeniceus*), California quail, mourning dove, Nuttall's woodpecker (*Picooides nuttallii*), black phoebe (*Sayornis nigricans*), western wood-pewee (*Contopus sordidulus*), California towhee (*Pipilo crissalis*), northern harrier, red-tailed hawk (*Buteo jamaicensis*), western scrub jay (*Aphelocoma californica*), violet-green swallow (*Tachycineta bicolor*), and many other resident and migratory species.

Vernal Pools and Swales

Tulare County contains a significant distribution of vernal pools which are a sensitive natural community capable of supporting endemic special-status species. Vernal pool habitat is not present in the Proposed Project area, and has limited distribution, generally north of Colvin Mountain, and near Cottonwood Creek and the Town of Elderwood, under Alternative 2 and 6.

Under Alternative 3, more than three acres of vernal pool and swale habitat occur where the Big Creek-Rector lines traverse the Stone Corral Ecological Reserve. Due to its high sensitivity and the presence of numerous threatened and endangered species, this low-lying area was acquired by CDFG for conservation and supports federally designated critical habitat for several plant and wildlife species.

Vernal pools in the study area are dominated by annual forbs and grasses intermixed in some cases with perennial forbs. These pools species tolerate, or depend on, seasonal flooding or soil saturation during the growing season. As described by Stebbins (2008), vernal pools in the study area support spiny-sepaled button celery (*Eryngium spinosepalumi*), which is a sensitive plant species, loosestrife (*Lythrum hyssopifolia*), goldfields (*Lasthenia fremontii*), woolly heads

(*Psilocarphus tenellus*), Hoover's spurge (*Chamaesyce hooveri*), which is a federal listed threatened species, popcorn flower (*Plagiobothrys stipitatus*), seep grass (*Crypsis schoenoides*), foxtail (*Alopecurus howellii*), spikerush (*Heleocharis acicularis*), quillwort (*Isoetes* sp.) and many other native annuals. Special status plant and wildlife species associated with this habitat type are discussed below.

Jurisdictional Waters of the U.S., Including Wetlands

Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. They are recognized as important natural systems because of their value to fish and wildlife, and their functions as storage areas for flood flows, groundwater recharge, nutrient recycling and water quality improvement. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to saturated soils.

A formal wetland delineation has not been prepared for the Proposed Project or alternatives; however, a preliminary wetland assessment, which was performed during reconnaissance surveys provides an estimate of the number and type of wetland features that could be traversed or impacted by the Proposed Project and alternatives.

For the portions of the Proposed Project and alternatives that support orchards and croplands, historic and current land uses including ground leveling and farming activities have made wetland habitats generally uncommon. Within these areas, wetlands habitats are largely limited to managed irrigation canals.

Several drainages originate in the Sierra Nevada Mountains and traverse the study area. One of the major drainages in the study area, the Kaweah River, has numerous tributaries that would be crossed by the Proposed Project and alternatives. Among these tributaries are Cameron Creek, Deep Creek, Long Canal, Mill Creek, Packwood Creek and the St. Johns River, which would all be crossed by the Proposed Project and alternatives. These natural and modified waterways have the ability to support significant areas of wetlands and riparian habitat. Seasonal wetland and vernal pool habitats are also present under Alternative 3 (Stone Corral Ecological Reserve) and in portions of Alternative 2 and 6.

Special-Status Species

Several species that occur in the study vicinity are accorded "special-status" because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special-status species" in this EIR, following a convention that has developed in practice but has no official sanction. The various categories encompassed by the term, and the legal status of each, are discussed in the *Regulatory Context* below.

Special-status plant and wildlife species that are known to or have potential to occur in the study area are discussed below. Figure 4.4-2 and Figure 4.4-3 display known occurrences of special-status plant and wildlife species in the study area, respectively.

A list of special-status species reported or expected to occur within the study area as well as information pertaining to natural communities of special concern was compiled on the basis of data in the PEA (SCE, 2008), Stebbins's (2008) biological study, the CNDDDB (CDFG, 2009), California Native Plant Society (CNPS) online database, and other available scientific databases. The list is intended to be comprehensive and the "Potential for Occurrence" designations apply to species and habitats in the study area that would not necessarily be impacted by the Proposed Project or alternatives. Further information was gathered during site visits to determine the potential presence of conditions that could support any of the special-status species and/or natural communities of special concern identified in Table 4.4-1.

Based upon this information, special-status species and/or sensitive natural communities that have at least a moderate to high potential for occurrence within the study area and could be exposed to project-related impacts (i.e., species or habitat that is either known to occur in the study area or with a high potential to occur) are described below.

Special-Status Wildlife

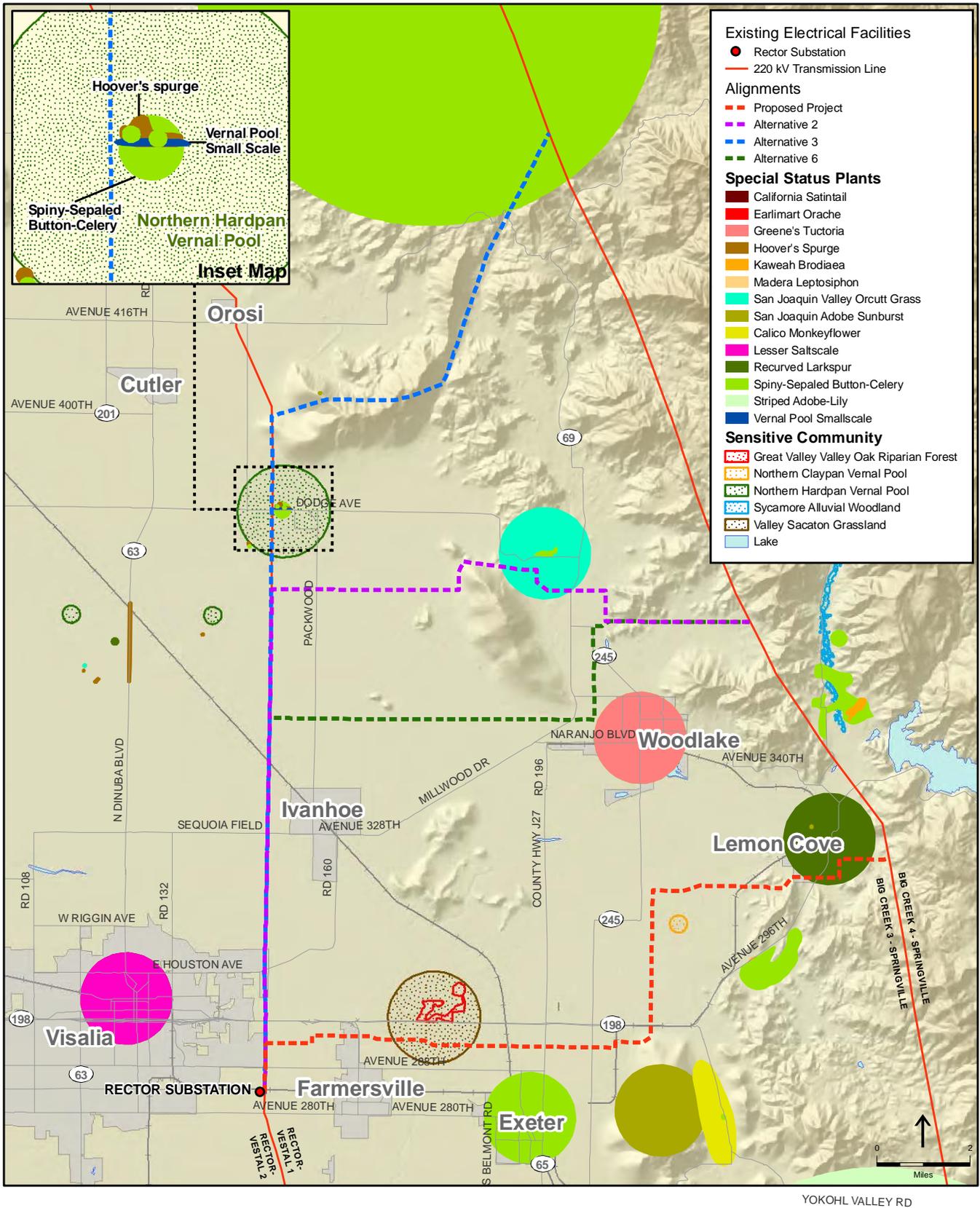
Listed Invertebrates

Vernal Pool Fairy Shrimp. The vernal pool fairy shrimp (*Branchinecta lynchi*) is a federally threatened species. The species is associated through much of its range with seasonal pools and puddles (vernal pools) that occur in grasslands habitat. The vernal pool fairy shrimp is being threatened throughout its range by factors such as agriculture and development. Critical habitat² for this species is present in a portion of the Stone Corral Ecological Reserve which Alternative 3 would traverse for approximately one mile (Figure 4.4-4). A few scattered pools occur in annual grassland habitat in the eastern portion of Alternatives 2 and 6, within areas identified as critical habitat for San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), which is discussed below. This species is presumed present in all seasonal wetland and vernal pool habitats in or near the Proposed Project and alternative alignments.

Valley Elderberry Longhorn Beetle. The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is a federally threatened species. The valley elderberry longhorn beetle is specifically found within California's Central Valley in association with Mexican and blue elderberry shrubs. The species can be identified by the characteristic larval emergence holes it leaves in the stems of occupied plants.

About 12 blue elderberry shrubs occur as a component of riparian habitat at three drainages that would be spanned by the Proposed Project: Deep Creek, Outside Creek and Yokohl Creek, though elderberry shrubs may occur elsewhere within the project area. Five or more large

² A discussion of critical habitat follows the special status species descriptions.

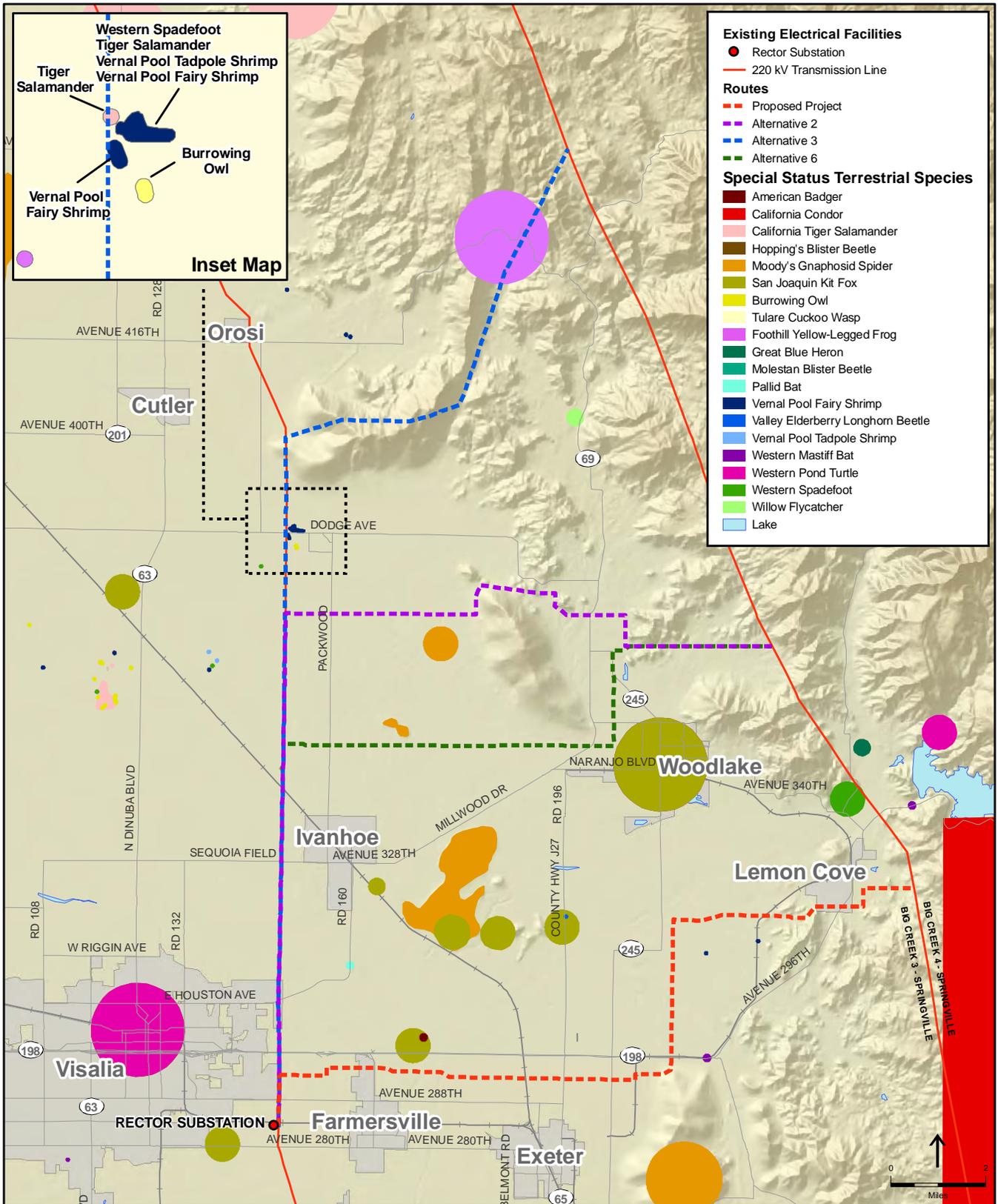


SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; CNDDB, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.4-2

Special Status Plant Species and Sensitive Communities within the Study Area



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; CNDDDB, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.4-3
Special Status Terrestrial
Species within the Study Area

**TABLE 4.4-1
SPECIAL-STATUS SPECIES REPORTED IN OR CONSIDERED FOR THE
PROPOSED PROJECT AND ALTERNATIVES**

Common Name Scientific Name	Listing Status: Fed/State/ CNPS	General Habitat	Occurrence Reported in Area/ Potential for Occurrence			
			Proposed Project	Alternative 2	Alternative 3	Alternative 6
Invertebrates						
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES						
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/--/--	Vernal pools or other areas capable of ponding water seasonally	Low	Mod.	Present	Mod.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT/--/--	Riparian habitat, stream banks and other areas that support its host plant, elderberry shrubs	Present	Present	Present	Present
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE/--/--	Vernal pools or other areas capable of ponding water seasonally	Low	Mod.	Present	Mod.
Amphibians						
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES						
<i>Ambystoma californiense</i> California tiger salamander	FT/SC/--	Wintering sites occur in grasslands occupied by burrowing mammals; breed in ponds and vernal pools	Low	Mod.	Present	Mod.
SPECIES OF SPECIAL CONCERN						
<i>Rana boylei</i> Foothill yellow-legged frog	--/CSC/--	Shaded, shallow streams with rocky or cobbly substrate	Absent	Absent	Low	Absent
<i>Spea hammondi</i> Western spadefoot	--/CSC/--	Requires seasonal ponds and pools for breeding	Low	Present	Present	Present
Reptiles						
SPECIES OF SPECIAL CONCERN						
<i>Actinemys marmorata</i> Western pond turtle	--/CSC/--	Lakes, ponds, reservoirs, and slow-moving streams and rivers, primarily in foothills and lowlands	Low	Low	Low	Low
Birds						
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES						
<i>Buteo swainsoni</i> Swainson's hawk	--/ST/--	Nests in large trees, often near water, open grasslands, or agricultural lands	Mod.	Mod.	Mod.	Mod.
<i>Empidonax traillii</i> Willow flycatcher	--/SE/--	Deciduous thickets, especially willows, often near water	Low	Low	Low	Low
<i>Gymnogyps californianus</i> California condor	FE/ST/CFP	Steep, rocky scrub, oak and pine woodlands and savannahs, often nesting near cliffs or large trees	Low	Low	Low	Low

TABLE 4.4-1 (Continued)
SPECIAL-STATUS SPECIES REPORTED IN OR CONSIDERED FOR THE
PROPOSED PROJECT AND ALTERNATIVES

Common Name Scientific Name	Listing Status: Fed/State/ CNPS	General Habitat	Occurrence Reported in Area/ Potential for Occurrence			
			Proposed Project	Alternative 2	Alternative 3	Alternative 6
Birds (cont.)						
SPECIES OF SPECIAL CONCERN						
<i>Ardea herodias</i> Great blue heron	--/CSC/--	Near water sources, often nesting in colonies in tall trees	Low	Low	Low	Low
<i>Aquila chrysaetos</i> Golden eagle	BEPA/--/--	Nests in canyons and large trees in open habitats	High	High	High	High
<i>Athene cunicularia</i> Burrowing owl	--/CSC/--	Nests and forages in low-growing grasslands with burrowing mammals	Mod.	Mod.	Present	Mod.
Mammals						
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES						
<i>Vulpes macrotis nutica</i> San Joaquin kit fox	FE/ST/--	Annual grasslands or grassy open areas with shrubs, loose-textured soils for burrows and prey base	High	High	High	High
SPECIES OF SPECIAL CONCERN						
<i>Antrozous pallidus</i> Pallid bat	--/CSC/--	Roosts in buildings, caves, or cracks in rocks	Low	Low	Low	Low
<i>Eumops perotis californicus</i> Greater western mastiff bat	--/CSC/--	Breeds in rugged, rocky canyons and forages in a variety of habitats	Low	Mod.	Mod.	Mod.
<i>Taxidea taxus</i> American badger	--/CSC/--	Dry, open grasslands	Mod.	Mod.	Mod.	Mod.
Plants						
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES						
<i>Brodiaea insignis</i> Kaweah brodiaea	--/SE/1B	Foothill woodland openings	Low	Mod.	Mod.	Mod.
<i>Chamaesyce hooveri</i> Hoover's spurge	FT/--/1B	Found in vernal pools on volcanic mudflow or clay substrate.	Low	Mod.	Present	Mod.
<i>Fritillaria striata</i> Striped adobe-lily	--/ST/1B	Areas with adobe clay soils	Low	Low	Low	Low
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT/SE/1B	Endemic to vernal pools of the San Joaquin Valley.	Low	High	High	High
<i>Pseudobahia peirsonii</i> San Joaquin adobe sunburst	FT/SE/1B	Annual herb found in cismontane woodland and in valley and foothill grassland on adobe clay substrate.	Low	Mod.	Mod.	Low
<i>Tuctoria greenei</i> Greene's tuctoria	FE/SR/1B	Vernal pools	Low	Low	Mod.	Low

**TABLE 4.4-1 (Continued)
SPECIAL-STATUS SPECIES REPORTED IN OR CONSIDERED FOR THE
PROPOSED PROJECT AND ALTERNATIVES**

Common Name Scientific Name	Listing Status: Fed/State/ CNPS	General Habitat	Occurrence Reported in Area/ Potential for Occurrence			
			Proposed Project	Alternative 2	Alternative 3	Alternative 6
Plants (cont.)						
SPECIES OF SPECIAL CONCERN						
<i>Atriplex erecticaulis</i> Earlimart orache	--/--/1B	Valley and foothill grassland	Low	Low	Low	Low
<i>Atriplex minuscula</i> Lesser saltscale	--/--/1B	Annual herb occurring in chenopod scrub, playas, and in valley and foothill grassland with sandy, alkaline substrate.	Low	Low	Low	Low
<i>Atriplex persistens</i> Vernal pool smallscale	--/--/1B	Found in alkaline vernal pools.	Low	Low	Low	Low
<i>Delphinium recurvatum</i> Recurved larkspur	--/--/1B	Perennial herb occurring in chenopod scrub, cismontane woodland, and in alkaline substrate in valley and foothill grassland.	Low	Low	Low	Mod.
<i>Eryngium spinosepalum</i> Spiny-sepaled button celery	--/--/1B	Vernal pools	Low	Present	Present	Present
<i>Imperata brevifolia</i> California satintail	--/--/2	Chaparral and scrub	Low	Low	Low	Low
<i>Mimulus pictus</i> Calico monkeyflower	--/--/1B	Native bunchgrass grasslands	Low	Low	Low	Low

STATUS CODES:

Federal (U.S. Fish and Wildlife Service):

BEPA = Bald and Golden Eagle Protection Act
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government

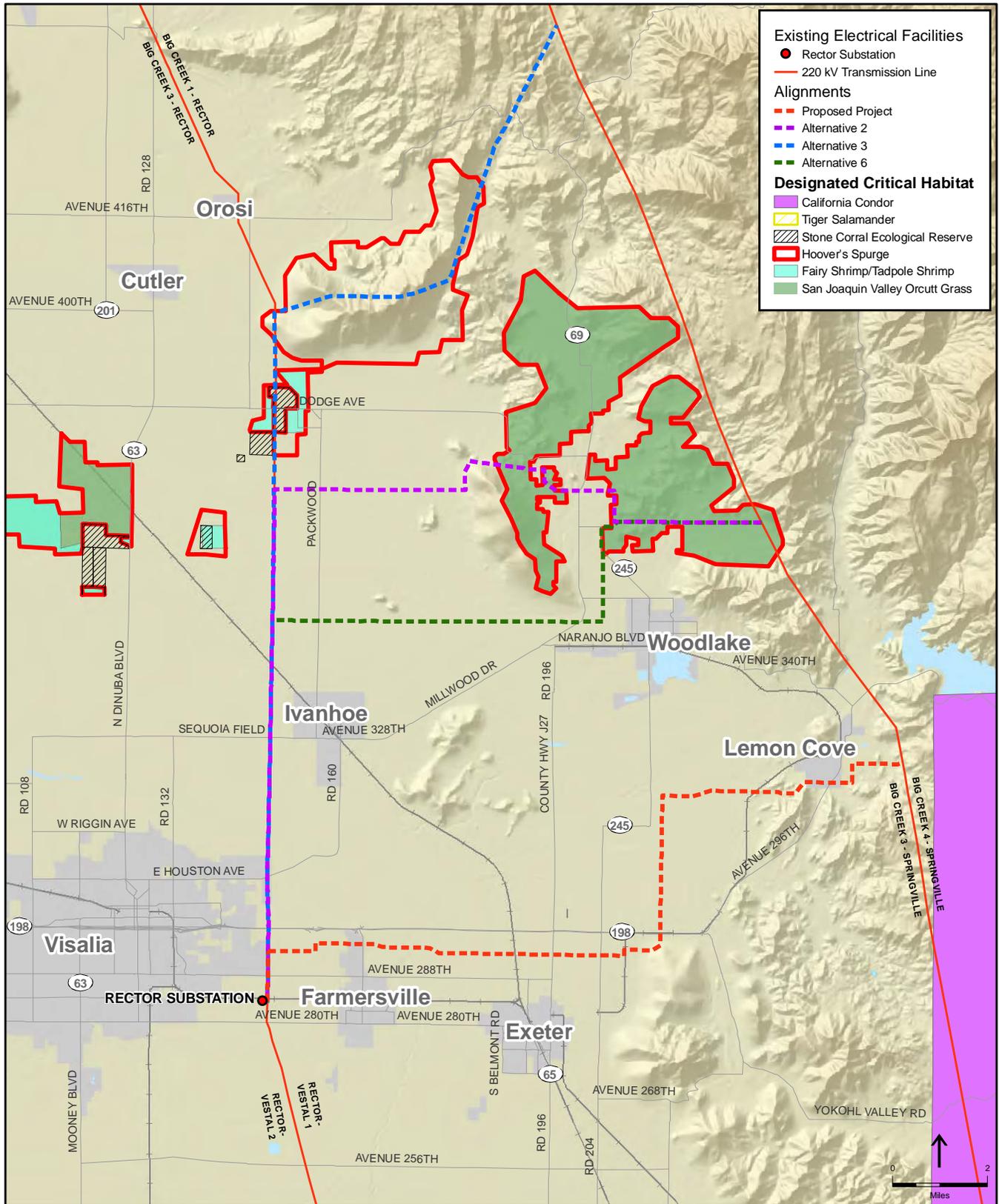
State (California Department of Fish and Game):

SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SR = Listed as Rare by the State of California (plants only)
SC = Candidate for listing as threatened or endangered by the State of California
CSC = California species of special concern
CFP = California fully protected species

California Native Plant Society (CNPS):

List 1A = Plants believed extinct
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common elsewhere

SOURCES: CNPS, 2009; CDFG, 2009



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; USFWS, 1993, 2005, 2006, 2008; CDFG, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.4-4
Designated Critical Habitat

elderberry shrubs are present under Alternative 2, 3 and 6 at the St. Johns River, immediately below and within the base of an existing tower. Under Alternative 2, approximately six additional elderberry shrubs would be spanned by the project. Valley elderberry longhorn beetle are presumed present at each of these locations.

Vernal Pool Tadpole Shrimp. The vernal pool tadpole shrimp (*Lepidurus packardii*) is a federally endangered species. This species is endemic to California's Central Valley and is associated with a variety of natural and artificial pool habitats ranging in size from small tire ruts to large seasonal pools. Seasonal wetlands that support vernal pool tadpole shrimp occur in areas supporting grasslands and other areas with slow draining soils. The species is associated through much of its range with vernal pools and is known to burrow into the muddy bottoms of these wetlands. Due to this association, the vernal pool tadpole shrimp is being threatened throughout its range by factors such as agriculture and development. Critical habitat and the species are present within the Stone Corral Ecological Reserve which Alternative 3 would traverse for approximately one mile (Figure 4.4-4).

In the absence of detailed branchiopod surveys, this species is presumed present in all vernal pool habitats in or near the Proposed Project and alternative alignments, and is considered to have a moderate potential to occur in association with small pools in the eastern portion of Alternative 2 and 6.

Listed Amphibians

California Tiger Salamander. The California tiger salamander (*Ambystoma californiense*) is a federally threatened species and a candidate for threatened or endangered status under the California Endangered Species Act. The California tiger salamander requires seasonal water sources in order to breed, and can be found within annual grassland and woodland habitats. Outside the breeding season, adults inhabit underground refuges, often small mammal burrows. Individuals are known to routinely travel up to half a mile or farther from breeding sites

There are no reported California tiger salamander occurrences or potential habitat in the Proposed Project area. Potential breeding sites are available within the study areas for Alternative 6 in a seasonal pool located immediately east of Colvin Mountain and also in the easternmost half mile of the Alternative 2 and 6 alignments. These potential breeding sites would be spanned by powerlines; however, if present, salamanders would likely be encountered in upland habitat. A breeding population is present in the Stone Corral Ecological Reserve, which would be traversed by Alternative 3.

Non-listed Amphibians

Foothill Yellow-Legged Frog. The foothill yellow-legged frog (*Rana boylei*) is a CDFG species of special concern. The species requires shaded, shallow streams with rocky or cobbly substrate. The only recorded occurrence of the species is near the Alternative 3 ROW in association with Moore Creek, roughly one and a half miles west of the Big Creek-Springville lines (CDFG, 2009). As the foothill yellow-legged frog is a strictly aquatic species, its distribution would be

limited to within rocky mountain creeks and riparian corridors. No other occurrences are known or reported in the study area and this species is not expected on the Proposed Project or alternative alignments.

Western Spadefoot. The western spadefoot (*Spea hammondi*) is a CDFG species of special concern that occurs in valley grassland and foothill habitats that are common throughout California's Central valley. The species requires vernal pool habitats for successful breeding and is therefore susceptible to land uses such as agriculture and development.

Habitat for this species does not occur within the Proposed Project area. Western spadefoot tadpoles were observed in April 2008 in a single ephemeral pool in the eastern grassland portion of Alternative 2 and 6 (B. Pittman, 2009). Potential breeding sites are available within the Alternative 6 alignment, in a large seasonal pool located immediately east of Colvin Mountain, and also generally in the easternmost half mile of the Alternative 2 and 6 alignments. These potential breeding sites would be spanned by powerlines.

This species is presumed present in grasslands and seasonal wetland habitat in the ROW for Alternative 3, in and near the Stone Corral Ecological Reserve.

Listed Birds

Swainson's Hawk. The Swainson's hawk (*Buteo swainsoni*) is a State-listed threatened species. Swainson's hawks often nest peripherally to riparian corridors as well as utilizing lone trees or groves of trees within agricultural fields. Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. The species forages and nests in the regional vicinity of the Proposed Project and alternatives, but nesting has not been identified in the study area (within five miles) (Woodbridge, 1998; CDFG, 2009). Valley oak habitat east of Farmersville in the Proposed Project area is suitable for Swainson's hawk nesting, though there are no locally reported nesting occurrences.

Non-listed Birds

Golden Eagle. The golden eagle (*Aquila chrysaetos*) receives federal protection under the Bald Eagle Protection Act. The species inhabits rolling foothills and mountainous areas within California and nest in canyons with cliff walls or in large trees in open areas. A relatively wide ranging species, the golden eagle is known to forage within grassland and foothill habitats of California's Central Valley and can therefore be expected to occur within the study area. Golden eagle nesting habitat occurs in association with blue oak woodland habitat in the foothill portion of the Proposed Project and alternatives while being most pronounced under Alternative 3, where blue oak woodlands comprises about 20 percent of available habitat. Potential nesting sites are available under Alternatives 2 and 6, where woodlands occur near the ROW (see Figure 4.4-1).

Burrowing Owl. Burrowing owls (*Athene cunicularia*) are relatively small, semicolonial owls that are residents of open dry grasslands and barren areas. They breed and roost in burrows excavated by ground squirrels and other small mammals. Where the number and availability of natural burrows is limited, owls may occupy human-made burrows such as drainage culverts,

cavities under piles of rubble, discarded pipe, and other tunnel-like structures (Zeiner et al., 1990a). Burrowing owls hunt from perches and are opportunistic feeders, consuming arthropods, small mammals (e.g., meadow voles), birds, amphibians, and reptiles. Burrowing owls occur within the Stone Corral Ecological Reserve which would be traversed by Alternative 3 and have a moderate potential to occur within non-cultivated grassland portions of the Proposed Project and alternatives.

Listed Mammals

San Joaquin Kit Fox. The San Joaquin kit fox (*Vulpes macrotis mutica*) is a federally threatened and State-endangered species that is a permanent resident of arid grasslands or open scrubland in the San Joaquin Valley, where friable soils are present. Dens are required year-round for reproduction, shelter, temperature regulation, and protection from predators. They require open grassland and savannah habitats for foraging and dispersal. Historically their habitat included native alkali marsh and saltbush scrub of the valley floor, but the availability of such habitats has diminished markedly due to agricultural conversion. Grasslands with friable soils are considered the principal habitat for denning, foraging, and dispersal, while open oak woodlands provide lower quality foraging and dispersal habitat. Kit foxes will use habitats that have been extensively modified by humans, including grasslands and scrublands with active oil fields, wind turbines, and agricultural matrices.

San Joaquin kit fox have been recently identified about one mile north of the Proposed Project and in agricultural lands near Alternatives 2, 3 and 6 (CDFG, 2009) (Figure 4.4-3). Kit foxes are known to move frequently, relying on agricultural lands and croplands as well as annual grasslands. Based on the known distribution of this species and available habitat, there is a moderate potential that kit foxes may occur at one time or another within agricultural or grassland portions of the Proposed Project and alternative alignments.

Non-Listed Mammals

Western Mastiff-bat. The western mastiff-bat (*Eumops perotis californicus*) prefers open, semiarid to arid habitats with low elevation and rugged, rocky areas that have suitable crevices for roosting. They roost in buildings and trees, provided they have adequate drops to allow them to take flight (Zeiner et al., 1990b).

Western mastiff-bats are uncommon, widespread residents of the San Joaquin and Salinas Valleys and coastal lowlands south of San Francisco Bay (Zeiner et al., 1990b). A female western mastiff-bat was collected by the California Department of Health Services in 1990 in the general vicinity of Woodlake (Figure 4.4-3) (CDFG, 2009). Open grassland, canyons, and woodland communities in the eastern portion of the Proposed Project and alternative alignments provide potential roosting areas for greater western mastiff-bats. Habitat is considered limited in agricultural portions of the Proposed Project and alternative alignments.

American Badger. In California, the American badger (*Taxidea taxus*) occupies a diversity of habitats; grasslands, savannas, and mountain meadows near timberline are preferred, though they

occur in deserts as well. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. Badgers range throughout the State except for the humid coastal forests of northwestern California in Del Norte County and the northwestern portion of Humboldt County (Williams, 1986). This species is expected to occur in low densities in grassland and oak woodland/savannah habitats throughout the study area. American badgers are known from the vicinity of the Kaweah Oaks Preserve, north of Highway 198 (CDFG, 2009).

Special-Status Plants

Listed Plants

Kaweah Brodiaea. Kaweah brodiaea (*Brodiaea insignis*) is a State-listed endangered species endemic to the Sierra Nevada foothills where it grows along the Tule and Kaweah Rivers in Tulare County. There is one known population in the study area, downstream from Lake Kaweah, about one mile east of the Big Creek-Springville transmission lines (Figure 4.4-2). This population is more than two miles from any facilities associated with the Proposed Project and alternatives (CDFG, 2009).

Hoover's Spurge. Hoover's spurge (*Chamaesyce hooveri*) is a federally threatened species. This low-growing annual herb of the Euphorbiaceae family flowers from July to September. The species requires vernal pools as habitat and is thus being threatened throughout its range by factors such as agriculture and development. Hoover's spurge is present in portions of the Stone Corral Ecological Reserve, which would be traversed by Alternative 3. Alternative 2 would traverse approximately four miles of critical habitat for this species, and Alternative 6 would traverse approximately three miles of critical habitat, which are discussed below (Figure 4.4-4).

Striped Adobe-lily. The striped adobe-lily (*Fritillaria striata*), is a State-listed endangered species that is endemic to the Sierra Nevada foothills in Kern and Tulare counties. This species grows in annual grasslands with adobe clay soils. There is a known population located in a mountainous area approximately two miles south of the Proposed Project. There are no known populations located in proximity to the alternatives.

San Joaquin Valley Orcutt Grass. San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*) is a federally threatened, State-endangered and a CNPS List 1B species. It is an annual grass of the Poaceae family that flowers from April to September. The species requires vernal pools as habitat and is thus being threatened throughout its range by factors such as agriculture and development. San Joaquin Valley Orcutt grass occurs within the ROW for Alternative 3 at the Stone Corral Ecological Reserve (Figure 4.4-2). Alternative 2 would traverse approximately four miles of critical habitat for this species, and Alternative 6 would traverse approximately three miles of critical habitat (Figure 4.4-4).

San Joaquin Adobe Sunburst. The San Joaquin adobe sunburst (*Pseudobahia peirsonii*) is a federal threatened and State-endangered species. It is a slender, woolly annual in the sunflower family (Asteraceae) that grows in grasslands with heavy adobe clay soils, often in association with non-native annual plants such as wild oats (*Avena* spp.), soft chess and red brome (*Bromus*

hordeaceus and *B. rubens*), and redstem filaree (*Erodium cicutarium*). This species was historically distributed from Kern County to Tulare and Fresno counties, though today is limited to few locations. One population is known about 2.5 miles east from the City of Exeter, about two miles south of the Proposed Project ROW. Given that this species occurs in the regional project vicinity, there is a moderate potential that it could occur in the alignment for the Proposed Project or one of the alternatives.

Greene's Tuctoria. Greene's tuctoria (*Tuctoria greenei*) is a federal listed species. It is an annual member of the grass family (Poa). After its initial discovery in Butte County in 1890, Greene's tuctoria was not reported again for over 40 years. However, during extensive surveys in the late 1930s, Hoover found the species at 12 sites in Fresno, Madera, Merced, San Joaquin, Stanislaus, Tehama, and Tulare Counties (USFWS, 2005). This species presently persists at about 41 sites in the above counties (CDFG, 2009). Greene's tuctoria has been found in three types of vernal pools: Northern Basalt Flow, Northern Claypan, and Northern Hardpan with a range of size and depth characteristics (USFWS, 2005). Appropriate vernal pool habitat is not present in the Proposed Project area, but may be present in vernal pools that occur in portions of Alternatives 2, 3, and 6.

Non-listed Plants

Recurved Larkspur. Recurved larkspur (*Delphinium recurvatum*) is a CNPS List 1B species. This perennial herb of the Ranunculaceae family flowers from March to June. The species occurs in scrub, woodland, or grassland habitat. The nearest occurrence of recurved larkspur is about one mile north of the Proposed Project and five miles south of Alternatives 2 and 6 (see Figure 4.4-2). No other occurrences are reported in the study area.

Spiny-sepaled Button-celery. Spiny-sepaled button-celery (*Eryngium spinosepalum*) is a CNPS List 1B species. This perennial herb of the Apiaceae family flowers from April to May. The species requires vernal pools or grassland as habitat. This species is present at the Stone Corral Ecological Reserve which would be traversed by Alternative 3, and is also present near Colvin Mountain associated with Alternative 2 (see Figure 4.4-2). This species is also reported from the easternmost three miles of the Alternative 3 ROW.

Natural Communities of Special Concern

Northern Hardpan Vernal Pool

Northern Hardpan Vernal Pool is a shallow, aquatic community dominated by annual herbs and grasses that are typical of vernal pool habitat. Germination and growth begin with winter rains, often continuing when inundated. Common species of the community are whitehead navarretia (*Navarretia luecocephala*), annual hairgrass (*Deschampsia danthonoides*) and dwarf wooly-heads (*Psilocarphus brevissimus*), among others. This community is present at the Stone Corral Ecological Reserve which would be traversed by Alternative 3 (CDFG, 2009), and occurs, to a limited extent, in association with seasonal wetlands and vernal pools that occur in eastern portions of Alternative 2 and 6.

Valley Sacaton Grassland

Valley Sacaton Grassland occurs in areas with seasonally high water tables or areas overflowed during winter flooding. The habitat is tussock-forming grassland dominated by alkali Sacaton grass (*Sporobolus airoides*). This vegetation community occurs north of Highway 198, about one-half mile north of the Proposed Project. The portion of the Proposed Project that is nearest to this habitat, located about three miles east of the Big Creek–Rector transmission lines, is cultivated as croplands and walnut orchards (see Figure 4.4-2). This habitat type does not occur in any of the alternative alignments.

Regulatory Context

Many biological resources in California are protected and/or regulated by a variety of laws and policies administered by federal, State, and/or local agencies. The following is an overview of the key agencies, regulations, and policies relevant to the Proposed Project and alternatives.

Federal

U.S. Fish and Wildlife Service

The USFWS administers the Federal Endangered Species Act (FESA) (16 U.S. Code [USC] 153 et seq.), the Migratory Bird Treaty Act (MBTA) (16 USC 703–711), and the Bald Eagle Protection Act (16 USC 668).

Federal Endangered Species Act. Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the “take”³ of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 requires the issuance of an “incidental take” permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of the project, by providing for the protection of the affected species.

There are no active or approved HCPs in the Proposed Project area or near any of the project alternatives. The Kaweah Delta Water Conservation District (District) is in the initial organization and planning stages of proposing several conservation plans in northwestern Tulare County. The Proposed Project would traverse one or more areas that the District is reviewing as a

³ Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

potential restoration sites. Because there are no adopted HCPs near the Proposed Project or project alternatives they are not considered further in this EIR.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed action will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)). Therefore, project-related impacts to these species or their habitats would be considered significant in this EIR.

Critical Habitat. The USFWS designates critical habitat for listed species under FESA. Critical habitat designations are specific areas within the geographic region that are occupied by a listed species that are determined to be critical to its survival and recovery in accordance with FESA. Federal entities issuing permits or acting as a lead agency must show that their actions do not negatively affect the critical habitat to the extent that it impedes the recovery of the species. Portions of Alternative 2 and 6 would traverse designated critical habitat for San Joaquin Valley Orcutt Grass and Hoover's spurge and Alternative 3 would traverse critical habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp and Hoover's spurge (Figure 4.4-4). Within designated critical habitat, the USFWS protects areas that provide the primary constituent elements (PCEs) for the survival and conservation of the subject listed species. PCEs are the physical and biological functions considered essential to species conservation that require special management considerations or protection.

PCEs for vernal pool fairy shrimp and vernal pool tadpole shrimp are those habitat components that are essential for the primary biological needs of foraging, sheltering, reproduction, and dispersal (USFWS, 2006). PCEs for these shrimp and San Joaquin Valley Orcutt grass and Hoover's spurge generally coincide with the presence of topographic features characterized by mounds and swales that provide pond continuously or intermittently, depressional features including isolated vernal pools underlying restrictive soil layers that continuously hold water for a minimum of 23 days in all but the driest years. Vernal pool fairy shrimp and vernal pool tadpole shrimp additionally require sources of food and structure that provide shelter in the pools (USFWS, 2006).

Protection of Nesting Birds - Migratory Bird Treaty Act. The MBTA (16 United States Code § 703 Supp. I, 1989) generally prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except as provided by the statute.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act, enforced by the USFWS, makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) or parts thereof.

U.S. Army Corps of Engineers

Clean Water Act, Section 404. The U.S. Army Corps of Engineers (USACE) administers Section 404 of the Clean Water Act (CWA). Section 404 regulates activities in wetlands and “other waters of the United States.” Wetlands are a subset of “waters of the United States” that are defined in the Code of Federal Regulations (CFR) (33 CFR 328.3[a]; 40 CFR 230.3[s]) as:

1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [33 CFR 328.3(b), 1991] as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions.)
3. All other waters—such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds—the use, degradation, or destruction of which could affect interstate or foreign commerce. This includes any waters with the following current or potential uses:
 - That are or could be used by interstate or foreign travelers for recreational or other purposes,
 - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or
 - That are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under the definition.
5. Tributaries of waters identified in paragraphs (1) through (4).
6. Territorial seas.
7. Wetlands next to waters identified in paragraphs (1) through (6).
8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding the Clean Water Act jurisdiction remains with the U. S. Environmental Protection Agency (328.3[a][8] added 58 CFR 45035, August 25, 1993).

State

California Department of Fish and Game

The CDFG administers a number of laws and programs designed to protect fish and wildlife resources under the Fish and Game Code (FGC), such as the California Endangered Species Act (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511), Native Plant

Protection Act (FGC Sections 1900 to 1913) and Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616).

California Endangered Species Act. In 1984, the State of California implemented the California Endangered Species Act (CESA) which prohibits the take of State-listed endangered and threatened species; although, habitat destruction is not included in the State’s definition of take. Section 2090 requires State agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFG administers the act and authorizes take through California Fish and Game Code Section 2081 agreements (except for designated “fully protected species,” see below). Unlike its federal counterpart, CESA protections apply to candidate species that have been petitioned for listing.

Regarding listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (see below).

Fish and Game Code Section 3503. California Fish and Game Code Section 3503.5 provides that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Construction activities that result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment and/or reproductive failure are considered a “take” by CDFG. Any loss of eggs, nests, or young or any activities resulting in nest abandonment would constitute a significant project impact.

Native Plant Protection Act. California Fish and Game Code Section 1900–1913, also known as the Native Plant Protection Act, is intended to preserve, protect, and enhance endangered or rare native plants in California. The act directs CDFG to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more cause. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. The act also directs the California Fish and Game Commission to adopt regulations governing the taking, possessing, propagation, or sale of any endangered or rare native plant.

Vascular plants that are identified as rare by the CNPS, but which may have no designated status or protection under federal or State endangered species legislation, are defined as follows:

- **List 1A:** Plants Presumed Extinct.
- **List 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **List 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.
- **List 3:** Plants about Which More Information is Needed – A Review List.
- **List 4:** Plants of Limited Distribution – A Watch List.

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of CEQA Guidelines Section 15380 and effects to these species are considered “significant” in this EIR. Additionally, plants listed on CNPS List 1A, 1B or 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code.

Lake or Streambed Alteration Program. The CDFG regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the California Fish and Game Code requires notification of the CDFG for lake or stream alteration activities. If, after notification is complete, the CDFG determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFG has authority to issue a Streambed Alteration Agreement under Section 1603 of the California Fish and Game Code. Requirements to protect the integrity of biological resources and water quality are often conditions of Streambed Alteration Agreements. These may include avoidance or minimization of heavy equipment use within stream zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

Species of Special Concern. CDFG maintains lists for candidate-endangered species and candidate-threatened species. California candidate species are afforded the same level of protection as listed species. California also designates species of special concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species, but may be added to official lists in the future. CDFG intends the species of special concern list to be a management tool for consideration in future land use decisions.

State Water Resources Control Board

Porter Cologne Water Quality Act. The State Water Resources Control Board (SWRCB), through its nine Regional Water Quality Control Boards (RWQCB), regulates waters of the State through the California Clean Water Act (i.e., Porter-Cologne Act). If the Corps determines wetlands or other waters to be isolated waters and not subject to regulation under the federal CWA, the RWQCB may choose to exert jurisdiction over these waters under the Porter-Cologne Act as waters of the State.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specific criteria. These criteria have been modeled after the definition of FESA and the section of Fish and Game Code discussing rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a candidate species that has not yet been listed by

CDFG or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies have the opportunity to designate the species protection.

CEQA also specifies the protection of other locally or regionally significant resources, including natural communities or habitats. Although natural communities do not presently have legal protection, CEQA requires an assessment of such communities and potential project impacts. Natural communities that are identified as sensitive in the CNDDDB are considered by CDFG to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities.

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3, and 6)

The following policies from the Tulare County General Plan Environmental Resources Management Element would be applicable to the Proposed Project and alternatives:

Fish and Wildlife

Policy 6.D.1: Tulare County shall, as part of the Environmental Resources Management Element (ERME), request of the State Department of Fish and Game, and enter into, a planning agreement to develop jointly a study which will identify in Tulare County the following:

- a. Significant habitat to be preserved in a natural state for the survival of rare and endangered species
- b. Fish and game habitat desirable for meeting the quantity of demand for fishing and hunting by residents of, and from without the county
- c. Wildlife habitat needed for meeting the quantity of demand for recreational, educational and scientific observation, scenic enjoyment and appreciation of open space

Policy 6.D.2: With the results of, these studies, the county should give the highest of priorities to designating land uses to assure protection of rare and endangered species. It should provide for other wildlife uses as much as possible which will also serve to meet open space needs.

Policy 6.D.3: Adopt a policy of conservation of unique and endangered species through habitat protection. Such necessary areas of habitat should be protected through open space zoning, which would envision only compatible uses.

Policy 6.D.4: Development practices that upset natural habitat in watersheds should be controlled to minimize erosion and maximize beneficial vegetation growth.

Policy 6.D.6: Agricultural and ranching interests should be encouraged to maintain or develop areas of natural habitat where terrain or soil is not conducive to maximum agricultural production anyway.

Policy 6.D.7: Support of the wild rivers program and in particular attempt, by every available means, to retain the Kern River above the mouth of South Creek, and the South Fork of the Kern River, above the mouth of Bartolas Creek, in a natural state.

Policy 6.D.8: Support should be expressed and actively offered to the establishment of a portion of Golden Trout Creek as a natural area for the observation of the native golden trout in its natural setting.

Policy 6.D.9: Areas containing mineral springs and seeps, where such seeps and springs appear to be vital to the continuation of wildlife in the area, should be covered with protective zoning which will prevent the destruction of these important natural resources.

Policy 6.D.10: Expedite the continuance and enlargement of wetland preserves that will provide waterfowl habitat necessary to maintenance of the flyway route through the valley. Such wetlands will also function as important habitat sources for many other small animal species, and should be identified also through flood control, water quality enhancement and air pollution control programs.

Vegetation

Policy 6.L.2: Identify areas particularly susceptible to wildfire and allow man-made uses only where it can be demonstrated that they do not appreciably increase fire hazard.

Policy 6.L.3: Identify areas of unique value in their natural state, for purposes of educational, scientific, and aesthetic uses and plan and program for their preservation.

Policy 6.L.5: Identify important wildlife habitat areas and provide for compatible uses within those areas.

(Tulare County General Plan, 2001).

City of Visalia

General Plan (Proposed Project and Alternative 2, 3, and 6). The following objectives from the City of Visalia General Plan Land Use Element would be applicable to the Proposed Project and alternatives:

Objective 2.1.A: Preserve and enhance natural and rural features such as waterways, Valley Oaks, and agriculture as significant assets and community resources.”

In regards to this objective, the City of Visalia General Plan Land Use Element calls for the preservation of selected waterways identified as valuable resources, the enhancement of views and public access to waterways and other significant features, expansion of the Conservation, Open Space, Recreation and Parks Element to the entire urban area proposed by the Land Use Element update, the protection of significant stands of Valley Oak woodland from further development, the enhancement of the scenic quality of the east end of Highway 198, the encouraging of use of native trees in landscaping, and the utilization of natural and man-made features as community buffer zones (City of Visalia, 1996).

Municipal Code, Chapter 12.20 Street Trees and Parkway Landscaping (Proposed Project and Alternatives 2, 3 and 6). The following sections of the City of Visalia Municipal Code would be applicable to the Proposed Project and alternatives:

12.20.010 - Purpose. The purpose of this chapter is to promote and regulate the planting, long term care, maintenance, and protection of street trees within the city. (Ord. 2004-21 (part), 2004)

12.20.030 - Street tree guidelines. The director is authorized to develop and administer guidelines for the care, preservation, pruning, planting, replanting, removal or disposition of street trees. The guidelines shall include an authorized species list, spacing guidelines for each authorized species, specifications for street tree planting, and specifications for nursery stock quality of street trees. The guidelines shall be periodically reviewed as updated as needed. (Ord. 2004-21 (part), 2004)

12.20.040 - Protection and maintenance of street trees. No street tree shall be altered, pruned, or removed except in accordance with the provisions of this chapter and the authorized street tree guidelines. No person shall cause any substance or material to be on or near a street tree which shall restrict its natural growth or shall cause it damage. (Ord. 2004-21 (part), 2004)

12.20.050 - Topping. Except as necessary to insure public safety or as authorized by the director, no person shall top any street tree or other tree located on public property. Trees severely damaged by storms or other causes, or trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this section at the discretion of the director. (Ord. 2004-21 (part), 2004)

12.20.060 - Protection during construction. Street trees shall be protected to the extent possible from damage during construction, sidewalk repair, repair of utility structures and facilities above and below ground, and other similar activities by the person conducting the construction or activity. The zone of protection shall include the ground beneath the crown dripline of the tree. Protection measures shall be included in building permit applications when building permits are required for construction. (Ord. 2004-21 (part), 2004)

12.20.090 - Trimming specifications. All street trees shall be pruned in accordance with American National Standards Institute (ANSI) A300 standards, as amended from time to time. A copy of the standards shall be maintained by the director and made available for review upon request. (Ord. 2004-21 (part), 2004)

12.20.110 - Quality of street trees. New plantings of street trees shall be in accordance with the street tree guidelines for nursery stock quality. (Ord. 2004-21 (part), 2004)

12.20.120 - Replacement of street trees. Street trees removed by the director or by natural causes shall be replaced on a one-for-one basis. The location and species of any replacement tree shall be determined by the director. (Ord. 2004-21 (part), 2004)

12.20.170 - Street trees under utility lines. Street trees planted under utility lines shall be of an approved species specified in the street tree guidelines. (Ord. 2004-21 (part), 2004)

12.20.210 - Utility company's right to perform maintenance. Tree limbs growing near overhead lines and utility facilities may be pruned to clear such facilities by the affected

utility company in compliance with applicable franchise agreements with the city.
(Ord. 2004-21 (part), 2004)

12.20.230 - Street tree removal permits. The director shall establish a permit system to be used to authorize street tree removal. The director shall use his or her discretion with respect to tree removal permits as governed by this chapter and by the street tree guidelines. No person will be authorized to remove trees covered by this chapter without first having received a permit to do such work. Permits shall not be valid for a period longer than thirty (30) days from issuance date. Exceptions, in the discretion of the director, shall be those permits issued to public utilities serving the area, which permits may be valid for a period of one year. (Ord. 2004-21 (part), 2004)

City of Farmersville (Proposed Project)

The City of Farmersville General Plan generally indicates that new development should, “Minimize the impact of new development on biotic resources in the planning area” (City of Farmersville, 2002).

4.4.2 Significance Criteria

Based on Section 15065 and Appendix G of the CEQA Guidelines, the project would result in a significant impact on the environment if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory);
- b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS;
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, other approved local, regional, or state habitat conservation plan.

CEQA Section 15380 provides that a plant or animal species may be treated as “Rare or Endangered” even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. As species of plants and animals become restricted in range

and limited in population numbers, species may become listed or candidates for listing as Endangered or Threatened and become recognized under CEQA as a significant resource. Examples of such species are vernal pool fairy shrimp and burrowing owl; the former is listed by the federal government and the latter is considered a California species of special concern.

In conducting the following impact analysis, three principal components of the CEQA Guidelines outlined above were considered:

- Magnitude of the impact (e.g., substantial/not substantial);
- Uniqueness of the affected resource (i.e., rarity of the resource); and
- Susceptibility of the affected resource to perturbation (i.e., sensitivity of the resource).

The evaluation of the significance of the following impacts considered the interrelationship of these three components. For example, a relatively small magnitude impact to a State or federally listed species would be considered significant because the species is very rare and is believed to be very susceptible to disturbance. Conversely, a plant community such as California annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

4.4.3 Applicant Proposed Measures

SCE proposes the following applicant proposed measure (APM) to minimize impacts on biological resources from the Proposed Project. The impact analysis in this EIR assumes that this APM would be implemented to reduce biological impacts as discussed below.

APM-BIO-01: Elderberry Avoidance. The elderberry avoidance guidelines of the USFWS (1999b) would be followed. At a minimum, all ground-disturbing activities should be avoided within 15 feet of any mature elderberries with basal stem diameters of 1 inch or greater. If elderberry plants with stems having a diameter of 1 inch or greater cannot be avoided, the USFWS would be consulted to develop mitigation measures appropriate to the type of impact.

4.4.4 Impacts and Mitigation Measures

Approach to Analysis

This section identifies potential impacts to the biological resources within vicinity of the Proposed Project while Section 4.4.5, below, identifies potential impacts within the vicinity of the alternatives. For both sections, the impact analysis focuses on foreseeable changes to the baseline conditions in the context of the significance criteria presented above and retained below for ease of reference. This analysis includes an evaluation of the potential direct and indirect effects of the Proposed Project and alternatives. Definitions and examples of these effects within the context of biological resources are provided below.

- **Direct Effects.** Direct or primary effects are those effects that are caused by the project and occur at the same time and place (CEQA Guideline §15358). Examples of these types of effects to biological resources include incidental take during construction, elimination of

suitable habitat due to project construction, and degradation of habitats due to construction related activities.

- **Indirect Effects.** Indirect or secondary effects are those effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable (CEQA Guideline §15358). Examples of these types of effects to biological resources include the discharge of sediment or chemicals that adversely affect water quality downstream of the project site, an increase in human activity during project operations, and potential growth-inducement effects.
- **Cumulative Impacts.** Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guideline §15355). These include the effects of future projects that are reasonably certain to occur within the area of the Proposed Project, and which may cumulatively increase the magnitude of effects described previously. Examples of these types of effects to biological resources include the effects of a cumulative loss of habitat for a special status species due to other planned projects in the area.

The Proposed Project and alternatives have the potential to have direct and indirect effect on terrestrial biological resources in the region. These potential effects include construction-related disturbance to wetlands, loss of natural habitats, and impacts to special status plant and wildlife species and their habitat. Mitigation measures were developed to reduce the level of significance of potential impacts. Mitigation measures focused first on minimization and avoidance of biological resources where possible. Where impacts could not be avoided, compensation for potential impacts was proposed.

The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades, and the associated construction, operation and maintenance activities would have no impact with respect to biological resources. Similarly, the same type of electrical system and safety upgrade activities proposed for the Rector Substation would not have any potential biological impacts.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory).

Construction

Impact 4.4-1: Construction activities could result in adverse impacts to the following special-status plant species: Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur and spiny-sepaled button celery. *Less than significant with mitigation (Class II)*

There is a low likelihood that construction of the Proposed Project could directly or indirectly impact special status plants. Protocol-level botanical surveys have been performed for the Proposed Project, with the exception of the eastern 800 foot reach where the landowner has denied site access for surveys. Based on survey findings, special status plants do not occur on

examined portions of the Proposed Project alignment. The unsurveyed portion of the alignment includes a former orchard and areas that are currently grazed. This area does not provide vernal pool habitat and no special status plant populations are known from the local vicinity of this area. Nonetheless, because presence/absence surveys have not been performed in this area, if special status plants are present they could be impacted by the Proposed Project.

Construction-related activities such as site preparation, vegetation removal, installation of poles/towers and the use of construction related equipment could cause temporary and permanent direct impacts by loss of special-status plants or their habitat, root or seed damage or indirectly through changes in soil profile. Indirect impacts are not anticipated because the creation of access roads would be limited under the Proposed Project. With implementation of Mitigation Measures 4.4-1a through 4.4-1c, the Proposed Project would result in less than significant impacts to special-status plants.

Mitigation Measure 4.4-1a: Rare plant surveys. SCE and/or its contractors shall conduct preconstruction surveys following CDFG and USFWS special-status plant survey guidelines to determine if populations are present in unsurveyed areas. Surveys shall document the location, extent, and size of special-status plant populations, if present, and shall be used to inform the planned avoidance of rare plant populations whenever possible.

To the extent feasible, the final project design shall minimize impacts on known special-status plant populations that are identified in the project area (e.g., by routing access roads away from plant populations). SCE and/or its contractors shall establish an appropriate exclusion zone (e.g., greater than 50 feet) to minimize the potential for direct and indirect impacts such as fugitive dust and accidental intrusion into sensitive areas (see Mitigation Measure 4.3-1b for dust control measures). The exclusion zone shall be staked and flagged in the field by a qualified botanist prior to construction.

Mitigation Measure 4.4-1b: Agency consultation, impact avoidance, minimization and compensation. If special status plants are identified and avoidance is not feasible, SCE shall compensate for the loss of special-status plants through the following steps:

- If special-status plant survey findings (Mitigation Measure 4.4-1a) indicate that the project would directly or indirectly impact a listed plant species, SCE shall consult with the USFWS and CDFG to determine if formal consultation is required under the State or federal Endangered Species Acts.
- Impacts to identified special status plant populations shall be minimized by avoiding impacts whenever possible, minimizing impacts, and compensating for project impacts that cannot be avoided.
- If impacts to special status plants cannot be avoided, a qualified ecologist shall prepare a restoration and mitigation plan according to CDFG guidelines and in coordination with CDFG and USFWS to mitigate for project effects. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-

term sustainability. The mitigation plan shall apply to portions of the project that support special status plants and also to any required mitigation lands.

- If threatened or endangered plant species are affected, land that supports known populations of affected special-status plants shall be identified, enhanced, and protected within the project area or acquired within Tulare County at a ratio of 1.1:1 and protected in perpetuity under conservation easement.

Indirect and direct impacts could occur as a result of non-native weeds or invasive plants becoming established within areas disturbed by project activities and/or transported into the project area on vehicles and construction equipment, respectively. The following measure shall be implemented to minimize the spread of noxious weeds.

Mitigation Measure 4.4-1c: Noxious Weed and Invasive Plant Control Plan. SCE shall develop and implement a Noxious Weed and Invasive Plant Control Plan consistent with standard Best Management Practices (see for example: Department of Transportation, State of California (2003); Storm Water Quality Handbooks; and Project Planning and Design Guide Construction Site Best Management Practices Manual). The plan shall be reviewed and approved by Tulare County and the CPUC and shall, at a minimum, address any required cleaning of construction vehicles to minimize spread of noxious weeds and invasive plants.

Significance after Mitigation: Less than Significant.

Impact 4.4-2: Construction activities could result in impacts on valley elderberry longhorn beetle and its habitat. *Less than significant with mitigation (Class II)*

Because agriculture is the dominant land use in much of the project area, the distribution of valley elderberry longhorn beetle habitat is limited. Elderberry shrubs were identified at three drainages that would be spanned by the Proposed Project: Deep Creek, Outside Creek and Yokohl Creek, though elderberry shrubs may occur elsewhere along the alignment.

As proposed, no elderberry shrubs were identified that would be directly impacted by the Proposed Project, though the close proximity of construction activities require that protective measures be implemented to minimize the potential for direct impacts and disturbance to elderberry shrubs. SCE has proposed avoidance through the implementation of APM-BIO-01 and consultation with USFWS to develop additional mitigation measures if avoidance is not feasible. In addition, a comprehensive elderberry shrub survey is needed to provide early identification of conflicts and avoid timing delays that may arise with USFWS consultation. With the implementation of Mitigation Measure 4.4-2a and 4.4-2b, based on the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS, 1999b), impacts to valley elderberry longhorn beetle would be less than significant.

Mitigation Measure 4.4-2a: SCE and/or its contractors shall perform a focused elderberry shrub survey to identify elderberry shrub distribution in the project area and document project impacts to valley elderberry longhorn beetle. Surveys shall document the location,

extent, and size of elderberry shrubs. If elderberry shrubs are identified in the project area and would be impacted by proposed activities, SCE shall consult with the USFWS as identified in Measure APM-BIO-01 (SCE, 2008), and implement Measure 4.4-2b.

Mitigation Measure 4.4-2b: If detailed surveys indicate that the project would directly or indirectly impact occupied valley elderberry longhorn beetle habitat, SCE shall consult with the USFWS to determine if formal consultation is required under the Endangered Species Act. SCE and/or its contractors shall avoid and minimize impacts to valley elderberry longhorn beetle and its habitat wherever possible. Where impacts cannot be avoided, SCE shall provide compensation for project impacts based on USFWS guidelines (1999 or more current) for avoiding, minimizing, and mitigating project impacts on valley elderberry longhorn beetle. If avoidance is not feasible, USFWS general compensation guidelines call for replacement of elderberry plants in designated mitigation areas at a ratio from 2:1 to 5:1 for each stem greater than one inch in diameter. Note that replacement ratios are by stem and not by elderberry shrub. Replacement stock shall be obtained from local sources. Plants are generally replaced at a 2:1 ratio for stems greater than one inch in diameter at ground level with no adult emergence holes, 3:1 for stems where emergence holes are evident in less than 50 percent of the shrubs, and 5:1 for stems greater than one inch in diameter where emergence holes are present in greater than 50 percent of elderberry shrubs.

SCE shall provide for replacement of elderberry shrubs by developing a restoration and mitigation plan as described in Measure 4.4-1b, to include success and performance criteria, monitoring programs, and measures to ensure long-term sustainability.

Significance after Mitigation: Less than Significant.

Impact 4.4-3: Construction activities would result in direct and/or indirect impacts on existing populations of, and habitat for, Swainson's hawk and golden eagle. *Less than significant with mitigation (Class II)*

Construction and operation activities associated with the Proposed Project, such as grading and preparation of temporary work areas, pull and tension sites, and access roads; operation of heavy equipment; installation and removal of poles/towers; and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, Swainson's hawk and golden eagle. Though such nesting has not been documented in the project area, nesting could potentially occur within or adjacent to any portion of the Proposed Project. The follow measures shall be implemented to reduce potential impacts to a less-than-significant level.

Mitigation Measure 4.4-3a: SCE and/or its contractors shall implement the following measures:

- Whenever feasible, construction near recently active nest sites shall start outside the active nesting season. The nesting period for golden eagle is generally between March 1 and August 15.

- If construction activities begin during the nesting period, a qualified biologist shall perform a preconstruction survey 14 to 30 days before the start of each new construction phase to search for golden eagle and Swainson's hawk nest sites within one-half mile of proposed activities. If active nests are not identified, no further action is required and construction may proceed. If active nests are identified, the avoidance guidelines identified below shall be implemented.
- For golden eagle, construction contractors shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones shall remain until young have fledged. For activities conducted with agency approval within this buffer zone, a qualified biologist shall monitor construction activities and the eagle nest(s) to monitor eagle reactions to activities. If activities are deemed to have a negative effect on nesting eagles, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. The resource agencies do not issue take authorization for this species.
- If construction begins during the Swainson's hawk nesting period, a qualified biologist shall conduct preconstruction surveys at least 14 days prior to construction following CDFG guidance in areas that potentially provide nesting opportunities to verify species presence or absence. If the survey indicates presence of nesting Swainson's hawks within a half-mile radius, the results shall be coordinated with CDFG to develop and implement suitable avoidance measures that include construction buffers (e.g., 500 feet) and nest monitoring during construction.
- Consistent with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* (CDFG, 1994), mitigation shall include the following approach:
 - No intensive new disturbances or other project-related activities that could cause nest abandonment or forced fledging shall be initiated within a quarter mile (buffer zone) of an active nest between March 15 and September 15.
 - Nest trees shall not be removed unless no feasible avoidance exists. If a nest tree must be removed, SCE shall obtain a management authorization (including conditions to offset the loss of the nest tree) from CDFG. The tree removal period specified in the management authorization is generally between October 1 and February 1.
 - Monitoring of the nest by a qualified biologist may be required if the project-related activity has potential to adversely impact the nest.
- CDFG often allows construction activities that are initiated outside the nesting season to continue without stopping even if raptors such as golden eagles choose to nest within 500 feet of work activities. Thus, work may continue without delay if surveys verify the local absence of nesting golden eagles, or if construction begins outside the nesting period (August 16 through February 28).

Following construction, SCE and/or its contractors shall survey for and monitor golden eagle nesting sites in the area to ensure that maintenance activities do not disrupt nest sites. Surveys will be performed at the beginning of the nesting season and continue through the

nesting season. Consistent with present policy, disruptive maintenance activities will be suspended within 500 feet of active eagle nests until the young eagles have fledged.

Mitigation Measure 4.4-3b: SCE shall acquire and/or restore foraging habitat for Swainson's hawk in accordance with CDFG guidelines, set forth in *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* (CDFG, 1994), as follows:

- Compensate for permanent foraging habitat losses (e.g., agricultural lands and annual grasslands) within one mile of active Swainson's hawk nests (acreage to be determined during preconstruction surveys) at a 1:1 replacement ratio).

Significance after Mitigation: Less than Significant.

Impact 4.4-4: Construction activities may impact protected nesting migratory birds. *Less than significant with mitigation (Class II)*

Construction activities associated with the Proposed Project, such as grading, preparation of temporary work areas, pull and tension sites, and access roads; operation of heavy equipment; installation and removal of poles/towers; and conductor installation, could disturb nesting birds and cause nest site abandonment and/or reproductive failure through an increase in noise, human presence and/or removal of habitat. SCE and/or its contractors shall implement the following measure to reduce potential impacts to nesting migratory birds a less than significant level.

Mitigation Measure 4.4-4: SCE and/or its contractors shall implement the following measures to avoid impacts on nesting raptors and other protected birds for activities that are scheduled during the breeding season (February 1 through August 31):

- No more than two weeks before construction within each new construction area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction sites where access is available.
- If active nests are not identified, no further action is necessary. If active nests are identified during preconstruction surveys, a no-disturbance buffer shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers are 500 feet for raptors and 250 feet for other nesting birds (e.g., waterfowl, and passerine birds). The size of these buffer zones and types of construction activities that are allowed in these areas could be further modified during construction in coordination with CDFG and shall be based on existing noise and disturbance levels in the project area.

Significance after Mitigation: Less than Significant.

Impact 4.4-5: Construction activities could result in direct and indirect impacts on burrowing owl. *Less than significant with mitigation (Class II)*

Portions of the Proposed Project are located within areas known to support burrowing owl, though owls have not been identified in or near the Proposed Project. If present locally, construction associated with the project could result in direct mortality of burrowing owls and temporary habitat loss. SCE shall implement the following measure in grasslands and other areas that may potentially support burrowing owl nesting to reduce potential impacts to a less than significant level.

Mitigation Measure 4.4-5: SCE and/or its contractors shall conduct preconstruction surveys and implement measures to avoid impacts to burrowing owls.

- A qualified biologist shall conduct preconstruction surveys for burrowing owls 14 to 30 days prior to the start of each new construction phase, using the most current CDFG protocol. Surveys shall cover grassland areas within a 500-foot buffer from all project construction sites within suitable grasslands habitat, checking for adult and juvenile burrowing owls and owl nests. If owls are detected during surveys, occupied burrows shall not be disturbed.
- Construction exclusion areas (e.g., orange exclusion fence or signage) shall be established around the occupied burrows, where no disturbance shall be allowed. During the nonbreeding season (September 1 through January 31), the exclusion zone shall extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas shall extend 250 feet around occupied burrows.
- If the above requirements cannot be met, passive relocation of onsite owls may be implemented as an alternative, but only during the nonbreeding season and only with prior CDFG approval. Passive relocation shall be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project area. The one-way doors shall be left in place for 48 hours to ensure the owls have left the burrow. The burrows shall then be excavated with a qualified biologist present. Construction shall not proceed until the project area is deemed free of owls.

Significance after Mitigation: Less than Significant.

Impact 4.4-6: Construction activities could result in direct and indirect impacts on San Joaquin kit fox and its habitat. *Less than significant with mitigation (Class II)*

Grassland and agricultural portions of the Proposed Project are generally known to support San Joaquin kit fox (CDFG, 2009). Construction activities could result in direct and indirect impacts to this species including potential harassment or mortality from use of heavy equipment. SCE and/or its contractors shall implement Mitigation Measure 4.4-6 in natural and agricultural areas, and other areas that may potentially support kit fox. Implementation of Mitigation Measure 4.4-6, derived from the *USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox* (USFWS, 1999a), would reduce direct and/or indirect impacts on San Joaquin kit foxes to a less-than-significant level.

Mitigation Measure 4.4-6: SCE and/or its contractors shall implement the following San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide potential habitat for San Joaquin kit fox.

- Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. All potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these sites, they may be closed following guidance established in the 1999 *USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox*.
- If kit fox occupancy is determined at a given site, closure activities shall immediately be halted and the USFWS contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence.
- To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat.
- To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than two feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals.
- All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area.
- To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area.

Significance after Mitigation: Less than Significant.

Operations

Impact 4.4-7: Operation of new transmission lines could impact raptors as a result of electrocution or collision. *Less than significant with mitigation (Class II)*

Poles and powerlines pose a danger to raptors as a result of electrocution and collision hazards, and are a recognized source of raptor mortality. Powerline electrocution is the result of two interacting factors: raptor behavior and pole design. Raptors are opportunistically attracted to

powerlines because they provide perch sites for hunting, resting, feeding, for territorial defense, or as nesting structures. Many standard designs of electrical industry hardware place conductors and groundwires close enough together that raptors can touch them simultaneously with their wings or other body parts, causing electrocution. Raptors and other birds may also collide with powerlines, which can be difficult for birds to detect for various reasons such as during night flight or during inclement weather conditions.

The type and magnitude of such impacts, and strategies to avoid conflicts between birds and new transmission lines have been well described by the Edison Electric Institute's Avian Power Line Interaction Committee (APLIC). The APLIC (2006) characterizes potential impacts as follows:

“Birds are generally electrocuted by transmission lines by due to environmental factors such as topography, vegetation, available prey and other, behavioral or biological factors influence avian use of power poles and inadequate separation between energized conductors or energized conductors and grounded hardware can provide two points of contact.

Raptors and other large birds are opportunistic and may use power poles for a number of purposes, such as nest sites, high points from which to defend territories, and perches from which to hunt. Some structures are preferred by birds because they provide considerable elevation above the surrounding terrain, thereby offering a wide field of view. Electrocution can occur when a bird completes an electric circuit by simultaneously touching two energized parts or an energized part and a grounded part of electrical equipment. Most electrocutions occur on medium-voltage distribution lines (4-34.5 kV), in which the spacing between conductors may be small enough to be bridged by birds. Poles with energized hardware, such as transformers, can be especially hazardous, even to small birds, as they contain numerous, closely-spaced energized parts.

“Avian-safe” structures are those that provide adequate clearances to accommodate a large bird between energized and/or grounded parts. Consequently, 60 inches of horizontal separation, which can accommodate the wrist-to-wrist distance of an eagle (which is approximately 54 inches), is used as the standard for raptor protection Likewise, vertical separation of at least 48 inches can accommodate the height of an eagle from its feet to the top of its head (which is approximately 31 inches). Because dry feathers act as insulation, contact must be made between fleshy parts, such as the wrists, feet, or other skin, for electrocution to occur. In spite of the best efforts to minimize avian electrocutions, some degree of mortality may always occur due to influences that cannot be controlled, e.g. weather.”

Implementation of the Mitigation Measure 4.4-7 would reduce impacts to a less-than-significant level.

Mitigation Measure 4.4-7: SCE shall follow Avian Power Line Interaction Committee guidelines for avian protection on powerlines. SCE shall use current guidelines to reduce bird mortality from interactions with powerlines. The Avian Power Line Interaction Committee (APLIC, 2006) and USFWS recommend the following:

- Provide 60-inch minimum horizontal separation between energized conductors or energized conductors and grounded hardware;

- Insulate hardware or conductors against simultaneous contact if adequate spacing is not possible;
- Use pole designs that minimize impacts to birds, and;
- Shield wires to minimize the effects from bird collisions.

Significance after Mitigation: Less than Significant.

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS.

Construction

Impact 4.4-8: Construction activities would impact riparian habitat, including native oak trees. *Less than significant with mitigation (Class II)*

The Proposed Project would span several natural and artificial waterways that support extensive riparian habitat, including Cameron Creek, Deep Creek, Outside Creek and Yokohl Creek, among others. These waterways would be spanned by the Proposed Project (e.g., from Structure #26 to #27) with no anticipated habitat impacts; however, the Proposed Project may require the removal or trimming of some vegetation to meet required wire clearances. The location and extent of such activities, if applicable, are not defined. Although the majority of the vegetation that would require removal is non-native, some native riparian habitat may be affected from implementation of the Proposed Project. Implementation of Mitigation Measure 4.4-8 would reduce impacts to a less-than-significant level.

Mitigation Measure 4.4-8: SCE shall, through project design, avoid riparian vegetation (especially native oak trees) where feasible. Should the removal of mature native oak trees be deemed unavoidable, SCE shall compensate riparian habitat impacts through habitat restoration on a 3:1 mitigation ratio based on affected acreage and a 9:1 mitigation ratio based on impacted native oak trees.

Significance after Mitigation: Less than Significant.

c) Effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Construction

Impact 4.4-9: Construction activities could impact jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. *Less than significant with mitigation* (Class II)

Potential impacts to wetlands and other jurisdictional waters of the U.S. and waters of the State were estimated based on a field review of accessible sites and aerial photos where site access was not available. Based on the preliminary assessment, the Proposed Project is not expected to directly or indirectly impact vernal pools, drainages or seasonal wetlands that occur in the project area. As proposed, such features would be avoided with a suitable upland construction buffer (e.g., at least 50 feet); therefore, no direct impacts were identified to jurisdictional features. Drainages that would be spanned by the Proposed Project include Cameron Creek, Tulare Irrigation District Canal, Deep Creek, Consolidated People's Ditch, Outside Creek, Pennebaker Ditch, Rice Ditch, Catron Ditch, Lemon Grove Ditch, Friant Kern Canal, Foothill Ditch and Yokohl Creek.

A wetland delineation would be required to verify that jurisdictional wetlands would not be impacted by the Proposed Project once this EIR is certified. Implementation of Mitigation Measure 4.4-9a and 4.4-9b would reduce impacts to jurisdictional wetlands to a less than significant level.

Mitigation Measure 4.4-9a: SCE and/or its contractors shall perform a wetland delineation and shall incorporate the results into the final design of transmission lines and access roads to ensure a minimum 50 foot construction buffer. The project shall be modified to minimize disturbance of any wetland, whenever feasible. In the event of any project changes that involve ground disturbance outside of the boundary of the existing wetland delineation, a new wetland delineation shall be performed.

Mitigation Measure 4.4-9b: Where jurisdictional wetlands and other waters cannot be avoided, to offset temporary and permanent impacts that occur as a result of the project, restoration and compensatory mitigation shall be provided through the following mechanisms:

- Purchase or dedication of land to provide wetland preservation, restoration or creation. If restoration is available and feasible, then a mitigation replacement ratio of at least 2:1 shall be used. If a wetland needs to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented.
- A wetland mitigation and monitoring plan shall be developed by a qualified biologist or wetland scientist in coordination with CDFG, USFWS, USACE, and/or RWQCB that details mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. The plan shall quantify the total acreage lost, describe mitigation ratios

for lost habitat, annual success criteria, mitigation sites, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project.

The mitigation and monitoring plan shall be submitted to the appropriate regulatory agencies for approval. The plan and documentation of such agency approval shall be submitted to the CPUC prior to construction.

Significance after Mitigation: Less than Significant.

d) Interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Construction, Operations and Maintenance

During its operational phase, the proposed would not interfere with the movement of any migratory fish or wildlife species, obstruct established wildlife movement corridors, or impede the use of native wildlife nursery sites. The presence of new transmission lines brings the potential to increase electrocution and collision hazards to resident and migratory birds.

Impacts to resident and migratory birds from interactions with power lines, principally by electrocution, are considered less than significant because the project design incorporates the necessary clearance between energized portions and grounding structure to be considered safe for avian species that occur in the area (see Mitigation Measure 4.4-7). Ground facilities, including power poles/towers, access roads and substation upgrades would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. Similarly, such impacts are not expected during project construction or maintenance activities. Therefore, no impacts to wildlife movement or on wildlife nursery sites are expected as a result of the Proposed Project (No Impact).

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The Conservation Element of the Tulare County General Plan includes general objectives relating to biological resources. These objectives include the designation of land uses to assure protection of rare and endangered species and habitat protection (Tulare County, 2001). The Proposed Project largely avoids areas with sensitive biological resources and habitats (e.g., riparian corridors and the Kaweah Oaks Preserve), and is thus consistent with the County General Plan (No Impact).

The City of Farmersville General Plan calls to: “Minimize the impact of new development on biotic resources in the planning area” (Farmersville General Plan, 2002). In minimizing and

mitigating project impacts to biological resources, the portion of the Proposed Project in the City of Farmersville would be consistent with these general objectives (No Impact).

Impact 4.4-10: Construction activities could impact valley oaks or protected landmark trees in the City of Visalia. *Less than significant with mitigation* (Class II)

Project impacts to valley oaks and landmark trees in the City of Visalia have not been fully identified for the Proposed Project; however, through project design, SCE has made an effort to minimize encroachment into areas with substantial stands of trees, including valley oaks. The implementation of Mitigation Measure 4.4-10 would further ensure that SCE and/or its contractors consider and avoid impacts to sensitive trees in the City of Visalia, consistent with City of Visalia tree protection requirements.

Mitigation Measure 4.4-10: Within the City of Visalia, existing trees in the project area shall be protected during construction by following Best Management Practices to minimize damage to such trees. These would include, but are not limited to, the following measures that shall be implemented by SCE:

- Inventory valley oaks and landmark trees to determine their distribution within the project alignment;
- Establish tree protection zones that include most or all of the root zone and are also designed to protect the canopy of each tree to be retained on a site;
- Install tree protection fencing as needed to buffer and protect valley oaks or landmark trees from construction activities;
- Perform tree pruning and/or surgery as needed to enhance the health and structure of trees, and;
- Replace lost valley oaks or landmark trees at a 5:1 ratio within the City of Visalia, or fund the replacement of such trees by the City;
- Mitigate for soil compaction and tree injuries, including dust control.

Significance after Mitigation: Less than Significant.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

There are no adopted HCPs, NCCPs or other approved local, regional, or State habitat conservation plans in the vicinity of the Proposed Project; therefore, no impact would occur from implementation of the Proposed Project (No Impact).

4.4.5 Cumulative Impacts

The geographical context includes urban, agricultural and open space land uses in northwestern Tulare County that support common and sensitive biological resources.

Construction of the Proposed Project could result in both temporary impacts on special-status species (i.e., Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur, spiny-sepaled button celery, valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk and golden eagle) and their habitat. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to the incremental loss of undeveloped natural lands that provide habitat for these special-status species. Past, present and reasonably foreseeable projects are also required to comply with federal and State regulations protecting special-status species through implementation of mitigation measures during construction. Activities associated with the construction of the Proposed Project would cause relatively minor loss of undeveloped grassland habitat in the area, principally for the footprint of individual transmission towers/poles where they occur in non-agricultural lands, and for access roads where needed, that would traverse native habitat. Therefore, implementation of Mitigation Measures 4.4-1a – 1c, 4.4-2a and 2b, 4.4-3a and b, 4.4-5 and 4.4-6, which requires SCE to conduct surveys and to avoid, minimize and mitigate for potential impacts to special-status species and their habitat, would reduce the cumulative contribution of the Proposed Project to less than significant (Class II).

Construction of the Proposed Project could also impact riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to impacts to such features. As with special-status species, past, present and reasonably foreseeable projects are required to comply with federal and State regulations protecting riparian habitat and jurisdictional waters. It is anticipated that impacts to riparian habitat and jurisdictional waters would be avoided by the Proposed Project. However, a jurisdictional determination has not been made for features within the project area therefore there is the potential for impact. The potential project impacts in combination with other projects could contribute to a cumulatively significant impact on riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. Implementation of Mitigation Measures 4.4-9a and b would require SCE to perform a wetland delineation and have it verified by the USACE if there is a potential to impact jurisdictional features. Additionally, they would be required to avoid, minimize or mitigate potential impacts. For riparian habitat, implementation of Mitigation Measure 4.4-8 requires SCE to avoid, minimize or mitigate potential impacts. As noted above, it is anticipated that impacts from construction of the Proposed Project to riparian habitat and jurisdictional waters would be avoided or minimal; therefore, in combination with other projects as described in Section 3.6, *Cumulative Projects*, the Proposed Project would not contribute to a cumulatively significant impact on riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetland (Class II).

The portion of the project area that is within the City of Visalia contains valley oak and/or protected landmark trees. There is the potential for ongoing and future development projects in the City to impact valley oak and/or protected landmark trees. These projects are generally residential subdivisions that may require vegetation removal and/or grading. Permits to remove valley oak and/or protected landmark trees in order to construct such subdivisions would be required from the City. The potential construction impacts of the Proposed Project, in combination with other projects in the City, could contribute to a cumulatively significant impact on valley oak and/or protected landmark trees. Implementation of Mitigation Measures 4.4-10, which requires Best Management Practices to minimize damage to such trees including, but not limited to, replacement at a 5:1 ratio, would reduce the cumulative contribution of the Proposed Project to valley oak and/or protected landmark trees to less than significant (Class II).

The project area consists of urban, agricultural and open space that provide habitat for nesting migratory birds and raptors. There is the potential for ongoing and future development projects, mainly residential subdivisions and road widening, to impact nesting birds during construction. Moreover, residential developments would be supported by power infrastructure consisting of distribution voltage (i.e., less than 50 kV); however, distribution lines for new residential developments are generally required to be installed underground (SCE, 1998); therefore, there would be no additional potential for electrocution or collision of raptors from power infrastructure associated with the residential development projects. The potential construction impacts, in combination with other projects, could contribute to a cumulatively significant impact on nesting birds; however, there is no potential cumulative operational impact related to electrocution or collision of raptors with power infrastructure. Implementation of Mitigation Measure 4.4-4 would require SCE to conduct preconstruction surveys and avoid active nests with a suitable buffer. Therefore, with the implementation of this measure, the Proposed Project would not have a cumulatively considerable contribution to impacts on nesting birds (Class II).

4.4.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no impacts would occur to biological resources (No Impact).

Alternative 2

Compared to the Proposed Project, Alternative 2 would have relatively greater impacts on terrestrial and biological resources both directly and through habitat modification. Portions of the Alternative 2 ROW would impact several federal and State listed species that would not be impacted by the Proposed Project. The alignment additionally traverses about five miles of

designated critical habitat for Hoover's spurge and San Joaquin Orcutt grass, which support western spadefoot and are presumed to support vernal pool fairy shrimp, vernal pool tadpole shrimp, and California tiger salamander (breeding and upland habitat).

Special Status Plants and Wildlife

The Alternative 2 alignment supports populations of special status plant and wildlife species that are common to the Proposed Project, and several species that are unique to this alternative. Construction-related project impacts to these species would be considered significant prior to mitigation.

Based on preliminary botanical surveys, the only special status plant that occurs near the Alternative 2 alignment is spiny-sepaled button celery (a CNPS List 1B species). This species was identified in multiple locations east of Colvin Mountain in association with vernal pool habitat and in annual grasslands near the Big Creek-Springville lines (B. Pittman, 2009). These vernal pool areas would be spanned by Alternative 2 but individual plants that occur outside of wetlands could be impacted during project construction. The implementation of Mitigation Measure 4.4-1a, which provides for rare plant surveys, and 4.4-1b, which provides agency consultation, and impact avoidance, minimization and compensation, would reduce impacts to special status plants to less than significant (Class II).

Blue elderberry shrubs were identified at three locations along Alternative 2 and are presumed to support valley elderberry longhorn beetle. As identified in the *Setting*, five or more large elderberry shrubs occur within the alignment at the St. Johns River, immediately beneath and within the base of an existing tower to be removed. Construction activities could result in the removal of these five shrubs and the loss of all associated valley elderberry longhorn beetles. Three elderberry shrubs were identified and would be avoided at Cottonwood Creek, and two separate associations of elderberry shrubs were identified and would be avoided on Colvin Mountain. The implementation of Mitigation Measures 4.4-2a and 4.4-2b, which provide for detailed elderberry shrub surveys, agency consultation, and replacement of impacted elderberry shrubs would reduce project impacts to less than significant (Class II).

Similar to the Proposed Project (Impact 4.4-3), Alternative 2 has the potential to impact Swainson's hawk and golden eagle that could potentially nest within or near the Alternative 2 alignment. Though nesting has not been observed in the Alternative 2 ROW, potentially suitable Swainson's hawk nesting sites occur within riparian habitat (e.g., at St. Johns River and Cottonwood Creek) and in agricultural lands near the ROW. For golden eagle, potential nesting sites are present in isolated oak woodlands that occur near the eastern portion of the ROW. Additionally, protected migratory birds are expected to nest throughout the Alternative 2 alignment. Construction and operation activities associated with Alternative 2, such as grading, preparation of temporary work areas, pull and tension sites, access roads, operation of heavy equipment, installation and removal of poles, and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, Swainson's hawk, golden eagle or nesting migratory birds. The implementation of Mitigation Measures 4.4-3a and 4.4-3b would reduce potential project impacts to less than significant (Class II).

As identified for the Proposed Project, the burrowing owl and San Joaquin kit fox have regional distribution throughout the study area. Burrowing owls are expected to occur within open, short grasslands in and near the Alternative 2 alignment. Such habitat is present at Colvin Mountain and in the eastern portion of the alignment; however, this species has not been identified near the Alternative 2 ROW. San Joaquin kit fox are known to occur in the study area and also could be encountered at any location along Alternative 2, including within agricultural lands and annual grassland habitat. Construction associated with Alternative 2 could result in direct mortality of burrowing owls and/or San Joaquin kit fox and temporary habitat loss during construction. The implementation of Mitigation Measures 4.4-5 and 4.4-6 would reduce impacts to less than significant (Class II).

Similar to the Proposed Project, during operations the new transmission line associated with Alternative 2 would have the potential to interact with raptors resulting in bird electrocution or collision. The implementation of Mitigation Measure 4.4-7, which requires compliance with avian protection standards on powerlines, would reduce project impacts to less than significant (Class II).

Impact 4.4-Alt2-1: Construction activities associated with Alternative 2 could result in impacts to vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. *Less than significant with mitigation* (Class II)

Portions of Alternative 2 provide suitable habitat for and may support populations of the federally listed vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. Suitable habitat for these species is present in association with vernal pools and upland habitat that occur on and immediately east of Colvin Mountain, and in a small portion of the annual grassland habitat near the Big Creek-Springville lines. Within this area, two large vernal pools, one about half an acre in size, would be spanned by Alternative 2; one additional vernal pool is located within a proposed pull site area, and one seasonal pool that was observed to support western spadefoot breeding in April 2009 is within the footprint of a proposed tower site. On Colvin Mountain, proposed access roads and towers would be located within 100 feet of a seasonal pond that may support habitat for each of the above-named species. Project activities either within or near these aquatic sites have the potential to directly take individual shrimp, California tiger salamanders or western spadefoot, and activities in surrounding upland areas may directly take the later two species or indirectly impact shrimp species by reducing aquatic habitat quality. The implementation of Mitigation Measure 4.4-Alt2-1 would reduce this potential project impact to a less than significant level.

Mitigation Measure 4.4-Alt2-1: SCE shall assume the presence of vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot and California tiger salamander in all suitable habitat for which SCE chooses not to perform protocol-level surveys. SCE and/or its contractors shall minimize impacts on special status vernal pool wildlife species by avoiding habitat whenever possible, and by avoiding and minimizing direct and indirect impacts on vernal pools. Mitigation Measures 4.4-9a and 4.4-9b shall be applied to meet the specific requirements for the replacement or restoration of impacted seasonal wetland and vernal pool habitat.

Additional measures to minimize and avoid habitat for listed vernal pool wildlife species shall be implemented as required by USFWS and include:

- Avoidance of potential habitat by narrowing work corridors near vernal pools and seasonal wetland habitat to the greatest extent practicable.
- Prior to construction activities, a detailed biological evaluation shall be prepared by SCE that establishes baseline environmental conditions in areas that support vernal pools. Elements to be assessed include, at a minimum, the distribution and size of pools and swales within 100 feet of project activities, and a description of pools that includes maximum water depth, total dissolved solids, pH, and alkalinity. The biological evaluation shall be used as a basis for site restoration and long-term monitoring. An assessment of listed invertebrate and amphibian populations shall also be provided as a component of the baseline evaluation.
- A USFWS-approved construction monitor shall be present during construction within 500 feet of vernal pool habitat. SCE shall develop and implement a mitigation, monitoring, and management plan, with input from regulatory agencies that outlines long-term management strategies and performance standards to be attained to compensate for habitat losses resulting from the project. At a minimum, the plan shall include standards for mitigation site selection and construction specifications for mitigation sites, a description of site conditions including aerial maps, an analysis of local vernal pool habitat, and performance criteria by which site quality can be assessed over time (e.g., size, vegetation species present, date of initial ponding, ponding duration, and wildlife usage). A monitoring program shall be established to track the development of habitat conditions that are conducive to the establishment of vernal pool wildlife species.
- SCE shall mitigate for the loss of branchiopod habitat that will be filled or otherwise directly or indirectly impacted by the project by restoring impacted pools or providing compensatory habitat (e.g., through a USFWS-approved mitigation bank).
- A USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot, and California tiger salamander and their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve these species as they relate to the project, and the boundaries within which the project construction shall occur.
- All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any vernal pool or aquatic habitat.

Significance after Mitigation: Less than Significant.

Critical Habitat

Under Alternative 2, the proposed ROW would traverse about five miles of designated critical habitat for Hoover's spurge and San Joaquin Orcutt grass (Figure 4.4-4). Three portions of this area, two about one-half linear miles in length and another about one mile in length, support the

primary constituent elements that are considered essential for the biological needs of Hoover's spurge and San Joaquin Orcutt grass. The eastern area, near the Big Creek-Springville lines, is characterized by isolated vernal pools and a series of interconnected pools. A second area that supports seasonal wetlands and pools occurs east of Road 204 and north of Avenue 364. A third area includes portions of Colvin Mountain and areas further east that support individual vernal pools and roadside swales with vernal pool characteristics.

Neither Hoover's spurge nor San Joaquin Orcutt grass were observed in the Alternative 2 area during winter 2009 or earlier botanical surveys; however, their absence could be due to abnormal precipitation during the 2008-2009 rainfall season. Of the five miles of Alternative 2 that occur within designated critical habitat, the alternative covers about two linear miles within areas that support the primary constituent elements for Hoover's spurge and San Joaquin Orcutt grass. The precise distribution of pools needs to be further examined within the critical habitat unit to determine the extent of direct impacts; however, preliminary indications are that seasonal wetlands can be spanned by lines and that access roads would impact greater than four to five acres of upland habitat that supports the primary constituent elements for Hoover's spurge and San Joaquin Orcutt grass.

This impact would be reduced to a less than significant level through the implementation of Mitigation Measure 4.4-1a, which provides rare plant surveys, agency consultation regarding impacts to listed plants, and Mitigation Measures 4.4-9a and 4.4-9b, which mitigate for project impacts to jurisdictional wetlands. The implementation of these measures would impact less than significant (Class II).

Riparian Habitat or Other Sensitive Natural Community

Impact 4.4-Alt2-2: Project construction could disturb riparian habitat in the St. Johns River and potentially impact northern claypan vernal pool habitat at select locations between Colvin Mountain and the Big Creek-Springville lines. *Less than significant with mitigation (Class II)*

The removal of existing lattice towers in the St. Johns River channel is common to Alternatives 2, 3, and 6 and would temporarily disturb about 0.1 acre of riparian habitat that is growing beneath the existing towers. Vegetation that would be affected by construction activities includes about three large elderberry shrubs and associated riparian understory species. No trees or other woody riparian habitat would be removed. The removal of elderberry shrubs and vegetation replanting would be partly mitigated by implementation of Mitigation Measures 4.4-2a and 4.4-2b, which provides for the salvage and replacement of elderberry shrubs and consultation with the USFWS. In the event that Alternative 2 is selected, additional measures would be required to ensure that the riparian corridor of St. Johns River is restored to pre-project conditions. The implementation of Mitigation Measure 4.4-Alt2-2 would reduce impacts to less than significant.

Numerous vernal pools and seasonal wetlands occur in the portion of the Alternative 2 alignment between Colvin Mountain and the Big Creek-Springville lines. Due to the abnormal rainfall patterns in winter 2009, the distribution of these pools was not immediately obvious during

reconnaissance-level field surveys. In the absence of detailed surveys to inform the design and placement of towers, access roads and staging areas, it is assumed that activities associated with Alternative 2 could impact northern claypan vernal pools that occur in or adjacent to the alignment.

Because the Alternative 2 alignment has not been finalized, once a final alignment has been selected, a wetland delineation will be performed to confirm the extent of potential wetland impacts under Alternative 2, if any. The implementation of Mitigation Measures 4.4-9a and 4.4-9b, which provides for an inventory and avoidance of seasonal wetlands in the alignment, would reduce impacts to less than significant.

Mitigation Measure 4.4-Alt2-2: Riparian habitat shall be restored in areas where it is disturbed, and monitored to ensure the long-term survival of plantings. Where impacts to riparian habitat cannot be avoided, a qualified ecologist shall prepare a restoration and mitigation plan in coordination with CDFG to mitigate for project impacts to riparian habitat. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-term sustainability. The mitigation plan shall apply to portions of the project alignment that support restored riparian habitat.

Significance after Mitigation: Less than Significant.

Wetlands

Compared with the Proposed Project, Alternative 2 has a greater likelihood of causing direct and indirect impacts to wetlands through direct removal, filling, hydrological interruption, or other means. The alignment spans several drainages that would not be impacted by Proposed Project activities, including the Kaweah River and Cottonwood Creek. The removal of existing lattice towers in the St. Johns River channel would temporarily disturb about 0.1 acres of riparian habitat and barren river channel. The proposed lines would span a one-half acre vernal pool located east of Colvin Mountain, and pull and staging facilities would need to be reconfigured from the proposed configuration to avoid two additional vernal pools and a seasonal drainage.

Alternative 2 could additionally cause the temporary disturbance of freshwater emergent wetlands in the eastern portion of the alignment near the Big Creek-Springville lines, and could affect a limited, though unknown number of drainage features in support of access roads to new towers.

Because the alignment has not been finalized, once a final alignment has been selected, a wetland delineation will be performed to confirm the extent of jurisdictional wetland impacts under Alternative 2. The implementation of Mitigation Measures 4.4-9a and 4.4-9b would reduce impacts to less than significant (Class II).

Wildlife Corridors and Nursery Sites

As identified in the impact discussion for the Proposed Project, bird interactions with power facilities shall be minimized by implementing tower designs that provide the necessary clearance between energized portions and grounding structure to be considered safe for the avian species that occur in the area. Ground facilities, including power poles, access roads and substation upgrades would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. Therefore, no impacts to wildlife movement or wildlife nursery sites are expected as a result of Alternative 2 (No Impact).

Local Policies and Ordinances

As discussed for the Proposed Project, valley oaks or protected landmark trees could be impacted in the City of Visalia. The implementation of Mitigation Measure 4.4-10 would reduce this impact to less than significant (Class II).

Habitat Conservation Plans

There are no adopted HCPs or NCCPs in the Alternative 2 alignment (No Impact).

Alternative 3

Compared to the Proposed Project, Alternative 3 would have substantially greater impacts to special status plants and wildlife. This is due to activities that would be associated with the construction of approximately 10 miles of new access roads and transmission line in the foothills of the Sierra Nevada Mountains and proposed activities in and near the Stone Corral Ecological Reserve. This alternative also affects critical habitat for several species, which would not be affected under the Proposed Project.

Special Status Plants and Wildlife

The Alternative 3 alignment supports populations of special status plant and wildlife species that are common to the Proposed Project alignment, and several species that are unique to Alternative 3. Construction related project impacts to these species would be considered significant prior to mitigation.

Due to access constraints, botanical surveys were not performed on portions of Stokes Mountain and within the Stone Corral Ecological Reserve; however, ecological conditions and special status plant and wildlife species are well documented from the Reserve. Vernal pool habitat in the Reserve is known to support numerous special status plants including Hoover's spurge and San Joaquin Valley Orcutt grass, which are federally listed species, and spiny-sepaled button celery (a CNPS List 1b species), among others. Significant impacts would be associated with the removal of existing lattice towers, and the construction of new structures and access roads. The Alternative 3 alignment could directly impact about three or more acres of habitat that supports

Hoover's spurge and San Joaquin Valley Orcutt grass within the project footprint. The implementation of Mitigation Measure 4.4-1a through 4.4-1c would reduce this impact to less than significant (Class II).

Blue elderberry shrubs occur in several locations in the Alternative 3 alignment and are presumed to support valley elderberry longhorn beetle. As described for Alternative 2, five or more large elderberry shrubs occur within the alignment at the St. Johns River, immediately below and within the base of an existing tower and would presumably be removed or otherwise impacted by activities associated with Alternative 3. Numerous elderberry shrubs were identified in rural areas east of Stokes Mountain that could additionally be impacted by Alternative 3 activities. The implementation of Mitigation Measure 4.4-2a and 4.4-2b would reduce potential impacts to valley elderberry longhorn beetle to less than significant (Class II).

Similar to the Proposed Project, Alternative 3 has the potential to impact Swainson's hawk and golden eagle that could nest near the alignment. Though nesting by these species has not been observed in the Alternative 3 ROW, potentially suitable Swainson's hawk nesting sites occur within riparian habitat (e.g., at St. Johns River, the Kaweah River and Cottonwood Creek) and other locations near the ROW. For golden eagle, nesting sites are available in isolated oak woodlands that occur near the eastern portion of the ROW. Additionally, protected migratory birds are expected to nest throughout the Alternative 3 alignment. Construction activities associated with Alternative 3, such as grading and preparation of temporary work areas, pull and tension sites, and access roads, operation of heavy equipment, installation and removal of poles, and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, Swainson's hawk, golden eagle or nesting migratory birds. The implementation of Mitigation Measures 4.4-3a and 4.4-3b would reduce impacts to less than significant (Class II).

The burrowing owl and San Joaquin kit fox have regional distribution throughout the study area. Burrowing owls are expected to occur within open, short grasslands in and near the Alternative 3 alignment. Such habitat is present in the Stone Corral Ecological Reserve (where burrowing owls are present) and portions of the ROW located further north. San Joaquin kit fox are known to occur in the study area and have also been reported at the Reserve. This species may be encountered within agricultural lands and annual grassland habitat on the alignment. Construction associated with Alternative 3 could result in direct mortality of burrowing owls and/or San Joaquin kit fox and temporary habitat loss during construction. The implementation of Mitigation Measures 4.4-5 and 4.4-6 would reduce impacts to burrowing owl and San Joaquin kit fox to less than significant (Class II).

During operations, the Alternative 3 transmission line would have the potential to interact with raptors resulting in bird electrocution or collision. The implementation of Mitigation Measure 4.4-7 would reduce project impacts to less than significant (Class II).

Impact 4.4-Alt3-1: Construction activities associated with the Alternative 3 could result in impacts to vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. *Less than significant with mitigation (Class II)*

Portions of Alternative 3 provide suitable habitat for and may support populations of the federally listed vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. Suitable habitat for these species is present in the vicinity of the Stone Corral Ecological Reserve. Proposed activities would directly impact about 3.0 or more acres of aquatic habitat that supports these species within the project footprint and considerably more upland habitat that supports California tiger salamander and western spadefoot. Mitigation Measures 4.4-9a and 4.4-9b shall be applied to meet the specific requirements for the replacement or restoration of impacted seasonal wetland and vernal pool habitat. Mitigation Measure 4.4-Alt3-1 would further reduce this potential project impact to a less than significant level.

Mitigation Measure 4.4-Alt3-1: SCE shall assume the presence of vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot and California tiger salamander in all suitable habitat for which SCE chooses not to perform protocol-level surveys. SCE and/or its contractors shall minimize impacts on special status vernal pool wildlife species by avoiding habitat whenever possible, and by avoiding and minimizing direct and indirect impacts on vernal pools. Mitigation Measures 4.4-9a and 4.4-9b shall be applied to meet the specific requirements for the replacement or restoration of impacted seasonal wetland and vernal pool habitat.

Additional measures to minimize and avoid habitat for listed vernal pool wildlife species shall be implemented as required by USFWS and include:

- Avoidance of potential habitat by narrowing work corridors near vernal pools and seasonal wetland habitat to the greatest extent practicable.
- Prior to construction activities, a detailed biological evaluation shall be prepared by SCE that establishes baseline environmental conditions in areas that support vernal pools. Elements to be assessed include, at a minimum, the distribution and size of pools and swales within 100 feet of project activities, and a description of pools that includes maximum water depth, total dissolved solids, pH, and alkalinity. The biological evaluation shall be used as a basis for site restoration and long-term monitoring. An assessment of listed invertebrate and amphibian populations shall also be provided as a component of the baseline evaluation.
- A USFWS-approved construction monitor shall be present during construction within 500 feet of vernal pool habitat. SCE shall develop and implement a mitigation, monitoring, and management plan, with input from regulatory agencies that outlines long-term management strategies and performance standards to be attained to compensate for habitat losses resulting from the project. At a minimum, the plan shall include standards for mitigation site selection and construction specifications for mitigation sites, a description of site conditions including aerial maps, an analysis of local vernal pool habitat, and performance criteria by which site quality can be assessed over time (e.g., size, vegetation species present, date of initial ponding, ponding duration, and wildlife usage). A monitoring program shall be established to track the development of habitat conditions that are conducive to the establishment of vernal pool wildlife species.

- SCE shall mitigate for the loss of branchiopod habitat that will be filled or otherwise directly or indirectly impacted by the project by restoring impacted pools or providing compensatory habitat (e.g., through a USFWS-approved mitigation bank).
- A USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot, and California tiger salamander and their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve these species as they relate to the project, and the boundaries within which the project construction shall occur.
- All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any vernal pool or aquatic habitat.

Significance after Mitigation: Less than Significant.

Critical Habitat

Under Alternative 3, the proposed ROW would traverse about 8.2 miles of designated critical habitat for Hoover's spurge and San Joaquin Orcutt grass, 1.5 miles of which is within Stone Corral Ecological Reserve. The largest block of critical habitat for Hoover's spurge and San Joaquin Orcutt grass that is traversed by this alignment is near Stokes Mountain. In this area the alignment traverses about 6.7 miles of critical habitat for Hoover's spurge (see Figure 4.4-4); however, Alternative 3 facilities would generally be located on a hillside slope that does not support vernal pools or primary constituent elements for this species. Adjacent to and within the Reserve, the alignment would be within 100 feet of critical habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp for a linear distance of about one mile. Both Hoover's spurge and San Joaquin Orcutt grass occur in the portion of the Stone Corral Ecological Reserve that is traversed by the alignment. Hoover's spurge was not identified during botanical surveys in critical habitat for this species located on and near Stokes Mountain.

Construction of the Alternative 3 alignment in and near the Stone Corral Ecological Reserve could have a substantial permanent impact on vernal pool habitat and hydrology. Even if efforts were made to minimize ground disturbance within the Reserve, it is likely that greater than three acres of high quality aquatic habitat could be permanently impacted by new access roads and a similar or greater amount of upland annual grassland habitat would be lost to provide access roads.

Due to the large magnitude of this project impact and high sensitivity of the Reserve, this impact would remain significant unmitigable following the implementation of Mitigation Measures 4.4-1a through 4.4-1c (special status plants) and 4.4-9 (wetlands) (Class I).

Riparian Habitat or Other Sensitive Natural Community

Impact 4.4-Alt3-2: Construction activities would disturb riparian habitat in the St. Johns River. *Less than Significant with Mitigation (Class II)*

The removal of existing lattice towers in the St. Johns River channel would temporarily disturb about 0.1 acre of riparian habitat that is growing beneath the existing towers. Vegetation that would be affected by Alternative 3 activities includes about three large elderberry shrubs and associated riparian understory species. No trees or other woody riparian habitat would be removed. The removal of elderberry shrubs and vegetation replanting would be partly mitigated by implementation of Mitigation Measures 4.4-2a and 4.4-2b, which provides for the salvage and replacement of elderberry shrubs and consultation with the USFWS. In the event that Alternative 3 is selected, additional measures would be required to ensure that the riparian corridor of St. Johns River is restored to pre-project conditions. The implementation of Mitigation Measure 4.4-Alt3-3 would reduce impacts to less than significant.

Mitigation Measure 4.4-Alt3-2: Riparian habitat shall be restored in areas where it is disturbed, and monitored to ensure the long-term survival of plantings. Where impacts to riparian habitat cannot be avoided, a qualified ecologist shall prepare a restoration and mitigation plan in coordination with CDFG to mitigate for project impacts to riparian habitat. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-term sustainability. The mitigation plan shall apply to portions of the project alignment that support restored riparian habitat.

Significance after Mitigation: Less than significant

Impact 4.4-Alt3-3: Construction activities would potentially impact vernal pool habitat within the Stone Corral Ecological Reserve. *Significant Unmitigable (Class I)*

Unique to Alternative 3, the proposed ROW would traverse a portion of the Stone Corral Ecological Reserve that supports more than three acres of vernal pool habitat where the existing Big Creek-Rector lines traverse the Reserve. The removal of existing facilities, installation of new lines, and the creation of access roads, as presently proposed, would foreseeably impact more than three acres of northern claypan vernal pool habitat that is within designated critical habitat and is known to support listed plant and wildlife species (see the Alternative 3 discussion of critical habitat, above). Aside from direct impacts, project activities would have indirect impacts on adjacent vernal pools in the reserve and associated special status plant and wildlife species. The creation of permanent access roads in the reserve could permanently alter local hydrology in adjacent pools with compounding indirect project effects on wetlands and water flow in surrounding portions of the Reserve.

Because the Alternative 3 alignment has not been finalized, once a final alignment has been selected, a wetland delineation will be performed to verify the location of jurisdictional wetlands. Preliminary estimates demonstrate that the Alternative 3 alignment has at least three acres of wetlands within the project footprint and that a large portion of vernal pool impacts would be permanent. As seen with the Alternative 3 wetland analysis, impacts to the northern claypan vernal pool sensitive natural community would be significant and unmitigable, should the alignment traverse the Stone Corral Ecological Reserve. The implementation of Mitigation Measures 4.4-9a and 4.4-9b would incrementally reduce Alternative 3 effects; however, impacts would remain significant unmitigable following mitigation based on the extreme sensitivity of the Stone Corral Ecological Reserve to disturbance.

Mitigation Measure 4.4-Alt3-3a: Implement Proposed Project Mitigation Measure 4.4-9a.

Mitigation Measure 4.4-Alt3-3b: Implement Proposed Project Mitigation Measure 4.4-9b.

Significance after Mitigation: Significant unmitigable.

Wetlands

Alternative 3 would impact greater than three acres of vernal pool habitat with potential indirect impacts on an unknown area of wetland habitat in the Reserve. Permanent direct impacts on vernal pools and indirect impacts on adjacent pools are anticipated from the creation of permanent access roads, which could alter local hydrology and compound indirect project effects on surrounding portions of the reserve.

Alternative 3 could additionally cause the temporary disturbance of freshwater emergent wetlands in the eastern portion of the alignment near the Big Creek-Springville lines, and possibly permanent disturbance to a limited number of features in support of access roads to new towers. It is estimated that access roads would be constructed over no fewer than five ephemeral drainages, with resultant impacts to jurisdictional wetlands. Due to the magnitude and location of the impact, impacts to jurisdictional wetlands and other waters would be significant unmitigable following mitigation. The portion of the Reserve that is traversed by the project is highly sensitive and the creation of year-round access roads in this area would need to fill a substantial area of wetlands. Poles that are presently in these areas do not have year-round access roads. It is anticipated that this alternative would require an Individual permit from the USACE based on the magnitude of wetland impacts that would be incurred at the Reserve. Following the implementation of Mitigation Measures 4.4-9a and 4.4-9b, impacts would remain significant unmitigable (Class I).

Wildlife Corridors and Nursery Sites

As identified in the impact discussion for the Proposed Project, bird interactions with power facilities shall be minimized by implementing tower designs that provide the necessary clearance

between energized portions and grounding structure to be considered safe for the avian species that occur in the area. Ground facilities, including power poles, access roads and substation upgrades would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. Therefore, no impacts to wildlife movement or wildlife nursery sites are expected as a result of Alternative 3 (No Impact).

Local Policies and Ordinances

As discussed for the Proposed Project, valley oaks or protected landmark trees could be impacted in the City of Visalia. The implementation of Mitigation Measure 4.4-10 would reduce this impact to less than significant (Class II).

Habitat Conservation Plans

There are no adopted HCPs, NCCPs or adopted conservation plans in the Alternative 3 alignment (No Impact).

Alternative 6

Compared to the Proposed Project, Alternative 6 would have relatively greater impacts to special status plants and wildlife. The Alternative 6 alignment supports populations of special status plant and wildlife species that are common to the Proposed Project alignment, and several species that are unique to Alternative 6. Construction related project impacts to these species would be considered significant prior to mitigation.

Special Status Plants and Wildlife

Preliminary botanical surveys have covered the entire alignment and the only special status plant described from the alignment is spiny-sepaled button celery (a CNPS List 1B species). This species was identified in association with vernal pool habitat that occurs west of the Big Creek-Springville lines, and in annual grasslands located near the Big Creek-Springville lines. The vernal pool areas would be spanned by the project but individual plants that occur outside of wetlands could be impacted during project construction. The implementation of Mitigation Measure 4.4-1a, which provides for rare plant surveys, and 4.4-1b, would reduce impacts to special status plants to less than significant (Class II).

Blue elderberry shrubs were identified at one location in the Alternative 6 alignment, and are presumed to support valley elderberry longhorn beetle. As described for Alternative 2, five or more large elderberry shrubs at the St. Johns River could be impacted by Alternative 6 activities. The implementation of Mitigation Measure 4.4-2a and 4.4-2b would reduce potential impacts to valley elderberry longhorn beetle to less than significant (Class II).

As described for the Proposed Project (Impact 4.4-3), Alternative 6 has the potential to impact Swainson's hawk and golden eagle that may nest in or near the alignment. Though nesting by

these species has not been observed in the Alternative 6 ROW, potential Swainson's hawk nesting sites occur within riparian habitat (e.g., at the St. Johns River) and agricultural areas in the project area, and potential golden eagle nesting areas occur in isolated oak woodlands near the eastern portion of the ROW. Additionally, protected migratory birds are expected to nest throughout the Alternative 6 alignment. Construction and operation activities associated with Alternative 6, such as grading and preparation of temporary work areas, pull and tension sites, access roads, operation of heavy equipment, installation and removal of poles, and conductor installation, could result in direct or indirect impacts on existing populations of, and habitat for, Swainson's hawk, golden eagle or nesting migratory birds. The implementation of Mitigation Measures 4.4-3a and 4.4-3b would reduce impacts to less than significant (Class II).

As identified for the Proposed Project, the western burrowing owl and San Joaquin kit fox are regionally distributed throughout the study area. Burrowing owls are expected to occur within relative open, short grasslands in and near the Alternative 6 alignment. Such habitat occurs in the eastern portion of the alignment; however, this species has not been identified near the Alternative 6 ROW. San Joaquin kit fox are known to occur in the study area and also could be encountered at any location on the Alternative 6 alignment, including within agricultural lands and annual grassland habitat. Construction associated with Alternative 6 could result in direct mortality of burrowing owls and/or San Joaquin kit fox and temporary habitat loss during construction. The implementation of Mitigation Measures 4.4-5 and 4.4-6 would reduce impacts to burrowing owl and San Joaquin kit fox to less than significant (Class II).

As described for the Proposed Project (Impact 4.4-7), during operations the Alternative 6 transmission line has the potential to interact with raptors resulting in bird electrocution or collision. The implementation of Mitigation Measure 4.4-7 would reduce project impacts to less than significant (Class II).

Impact 4.4-Alt6-1: Construction activities associated with the Alternative 6 could result in impacts to vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. *Less than significant with mitigation* (Class II)

Portions of the Alternative 6 alignment provide suitable habitat for and may support unknown populations of the federally listed vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander and/or western spadefoot. Suitable habitat for these species is present in association with vernal pools and upland habitat that occur in a small portion of the annual grassland habitat near the Big Creek-Springville lines. Within this area, one seasonal pool was observed to support western spadefoot breeding in April 2009 and is within the footprint of a proposed tower site and additional pools occur in the local project vicinity. Project activities that occur in or near these aquatic sites have the potential to directly take individual shrimp, California tiger salamanders or western spadefoot, and activities in surrounding upland areas may directly take the later two species or indirectly impact the shrimp species by reducing aquatic habitat quality. Mitigation Measures 4.4-9a and 4.4-9b shall be applied to meet the specific requirements for the replacement or restoration of impacted seasonal wetland and vernal pool habitat. The

implementation of Mitigation Measure 4.4-Alt6-1 would further reduce this potential project impact to a less-than-significant level.

Mitigation Measure 4.4-Alt6-1: SCE shall assume the presence of vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot and California tiger salamander in all suitable habitat for which SCE chooses not to perform protocol-level surveys. SCE and/or its contractors shall minimize impacts on special status vernal pool wildlife species by avoiding habitat whenever possible, and by avoiding and minimizing direct and indirect impacts on vernal pools. Mitigation Measures 4.4-9a and 4.4-9b shall be applied to meet the specific requirements for the replacement or restoration of impacted seasonal wetland and vernal pool habitat.

Additional measures to minimize and avoid habitat for listed vernal pool wildlife species shall be implemented as required by USFWS and include:

- Avoidance of potential habitat by narrowing work corridors near vernal pools and seasonal wetland habitat to the greatest extent practicable.
- Prior to construction activities, a detailed biological evaluation shall be prepared by SCE that establishes baseline environmental conditions in areas that support vernal pools. Elements to be assessed include, at a minimum, the distribution and size of pools and swales within 100 feet of project activities, and a description of pools that includes maximum water depth, total dissolved solids, pH, and alkalinity. The biological evaluation shall be used as a basis for site restoration and long-term monitoring. An assessment of listed invertebrate and amphibian populations shall also be provided as a component of the baseline evaluation.
- A USFWS-approved construction monitor shall be present during construction within 500 feet of vernal pool habitat. SCE shall develop and implement a mitigation, monitoring, and management plan, with input from regulatory agencies that outlines long-term management strategies and performance standards to be attained to compensate for habitat losses resulting from the project. At a minimum, the plan shall include standards for mitigation site selection and construction specifications for mitigation sites, a description of site conditions including aerial maps, an analysis of local vernal pool habitat, and performance criteria by which site quality can be assessed over time (e.g., size, vegetation species present, date of initial ponding, ponding duration, and wildlife usage). A monitoring program shall be established to track the development of habitat conditions that are conducive to the establishment of vernal pool wildlife species.
- SCE shall mitigate for the loss of branchiopod habitat that will be filled or otherwise directly or indirectly impacted by the project by restoring impacted pools or providing compensatory habitat (e.g., through a USFWS-approved mitigation bank).
- A USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot, and California tiger salamander and their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve these species as they relate to the project, and the boundaries within which the project construction shall occur.

- All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any vernal pool or aquatic habitat.

Significance after Mitigation: Less than Significant.

Critical Habitat

Under Alternative 6, the proposed ROW would traverse about three miles of designated critical habitat for Hoover's spurge and San Joaquin Orcutt grass (Figure 4.4-4). A relatively small portion of this area, perhaps less than half a linear mile, supports the primary constituent elements that are considered essential for the biological needs of Hoover's spurge and San Joaquin Orcutt grass. This area is characterized by isolated vernal pools and a series of interconnected pools. Neither Hoover's spurge nor San Joaquin Orcutt grass were observed in the area during winter 2009 botanical surveys; however, this could be due to abnormal precipitation during the 2008-2009 rainfall season. Within the portion of designated critical habitat that supports the primary constituent elements for Hoover's spurge and San Joaquin Orcutt grass, Alternative 6 would install roughly three towers and two access roads. The precise distribution of pools needs to be further examined within the critical habitat unit to determine the extent of direct impacts; however, preliminary indications are that seasonal wetlands could be avoided by Alternative 6 activities and that access roads would impact about half an acre of upland habitat within designated critical habitat that supports the primary constituent elements for Hoover's spurge and San Joaquin Orcutt grass.

This impact would be reduced to a less-than-significant level through the implementation of Mitigation Measure 4.4-1a, which provides rare plant surveys, agency consultation regarding impacts to listed plants, and Mitigation Measures 4.4-9a and 4.4-9b, which mitigate for project impacts to jurisdictional wetlands. The implementation of these measures would reduce impacts to less than significant (Class II).

Riparian Habitat or other Sensitive Natural Community

Impact 4.4-Alt6-2: Project construction would disturb riparian habitat in the St. Johns River and potentially impact northern claypan vernal pool habitat at select locations between Colvin Mountain and the Big Creek-Springville lines. *Less than significant with mitigation (Class II)*

The removal of existing lattice towers in the St. Johns River channel would temporarily disturb about 0.1 acre of riparian habitat that is growing beneath the existing towers. The implementation of Mitigation Measures 4.4-2a, 4.4-2b and 4.4-Alt6-2 would reduce impacts to less than significant.

Several vernal pools and seasonal wetlands occur in the portion of the Alternative 6 alignment near the Big Creek-Springville lines. Due to the abnormal rainfall patterns in winter 2009, the distribution of these pools was not immediately obvious during reconnaissance-level field

surveys. In the absence of detailed surveys to inform the design and placement of towers, access roads and staging areas, project activities could impact northern claypan vernal pools that occur in or adjacent to the alignment. The implementation of Mitigation Measures 4.4-9a and 4.4-9b would reduce impacts to less than significant.

Mitigation Measure 4.4-Alt6-2: Riparian habitat shall be restored in areas where it is disturbed, and monitored to ensure the long-term survival of plantings. Where impacts to riparian habitat cannot be avoided, a qualified ecologist shall prepare a restoration and mitigation plan in coordination with CDFG to mitigate for project impacts to riparian habitat. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-term sustainability. The mitigation plan shall apply to portions of the project alignment that support restored riparian habitat.

Significance after Mitigation: Less than Significant.

Wetlands

Compared with the Proposed Project, Alternative 6 has a greater likelihood of causing direct and indirect impacts to jurisdictional wetlands through direct removal, filling, hydrological interruption, or other means. The alignment spans but would not impact the Kaweah River. The removal of existing lattice towers in the St. Johns River channel would temporarily disturb about 0.1 acres of riparian habitat and the barren river channel. The proposed Alternative 6 alignment is directed south of Colvin Mountain, and avoids Cottonwood Creek and other seasonal wetlands.

Alternative 6, like Alternative 2, could cause the temporary disturbance of freshwater emergent wetlands in the eastern portion of the alignment near the Big Creek-Springville lines, and possibly permanent disturbance to a limited number of features in support of access roads to new towers. The implementation of Mitigation Measures 4.4-9a and 4.4-9b would reduce impacts to less than significant (Class II).

Wildlife Corridors and Nursery Sites

As identified in the impact discussion for the Proposed Project, bird interactions with power facilities shall be minimized by implementing tower designs that provide the necessary clearance between energized portions and grounding structure to be considered safe for the avian species found in the area. Ground facilities, including power poles, access roads and substation upgrades would not create a barrier to wildlife movement or interfere with established wildlife corridors or nursery sites. Therefore, no impacts to wildlife movement or wildlife nursery sites are expected as a result of Alternative 6 (No Impact).

Local Policies and Ordinances

As discussed for the Proposed Project, valley oaks or protected landmark trees could be impacted in the City of Visalia. The implementation of Mitigation Measure 4.4-10 would reduce this impact to less than significant (Class II).

Habitat Conservation Plans

There are no adopted HCPs, NCCPs or adopted conservation plans in the Alternative 6 alignment (No Impact).

References – Biological Resources

- Avian Power Line Interaction Committee (APLIC), 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, Edison Electric Institute and the Raptor Research Foundation, Washington, D.C., 2006.
- California Department of Fish and Game (CDFG), 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California, 1994.
- CDFG, 2009. Rarefind 3 California Natural Diversity Database, Version 3.1.0. Accessed April 2009.
- California Native Plant Society (CNPS), 2009. Inventory of Rare and Endangered Plants, online computer program. Available at <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>. Accessed March 2009.
- City of Visalia, 1996. *General Plan, Land Use Element*, revised June 1996.
- City of Visalia Municipal Code, 2008. Available at [http://www.amlegal.com/nxt/gateway.dll/California/visalia_ca/cityofvisaliacaliforniamunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:visalia_ca](http://www.amlegal.com/nxt/gateway.dll/California/visalia_ca/cityofvisaliacaliforniamunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:visalia_ca). Accessed from November to December, 2008.
- California Department of Water Resources (DWR), 2009. California Data Exchange Center. Online at: http://cdec.water.ca.gov/snow_rain.html.
- Farmersville General Plan, 2002. Land Use Element, Circulation Element and Open Space, Conservation, parks and Recreation Element. Collins & Schoettler Planning Consultants.
- Hickman, James C., Ed. 1993. *The Jepson Manual, Higher Plants of California*. University of California Press, Berkeley.
- Holland, Robert F., 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game Nongame-Heritage Program, Sacramento.
- Mayer, K.E. and W.F. Laudenslayer, eds., 1988. *A Guide to Wildlife Habitats of California*, California Department of Fish and Game, Sacramento, CA, 1988.

- Pittman, B., 2009. CWB Memorandum describing observations of western spadefoot and spiny-sepaed button celery at various locations during field surveys conducted from April 6 to 8, 2009.
- Southern California Edison (SCE), 2008. Proponent's Environmental Assessment for the San Joaquin Cross Valley Loop Transmission Project. 2008.
- SCE, 1998. Rule 15, Distribution Line Extensions. Effective July 1, 1998.
- Stebbins, J.C., 2008. Biological Resources Study Report, San Joaquin Cross Valley Loop Transmission Project, jointly prepared with Southern California Edison, June 2008.
- Tulare County General Plan, 2001. Goals and Policies Report.
- U.S. Department of Agriculture (USDA), 2008. Natural Resources Conservation Service Soils Profile Website. Accessed March 2009.
- U.S. Fish and Wildlife Service, 1999a. Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. Sacramento, CA.
- U.S. Fish and Wildlife Service, 1999b. Conservation Guidelines for the Valley Elderberry Longhorn Beetle. Sacramento, CA.
- U.S. Fish and Wildlife Service, 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Portland, Oregon. xxvi +, 606 pages.
- U.S. Fish and Wildlife Service, 2006. Endangered and Threatened Wildlife and Plants; Endangered and Threatened Wildlife and Plants: Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants; Final Rule. Federal Register 71:28, February 10, 2006.
- Williams, D.F., 1986. Mammalian species of concern in California. California Department of Fish and Game Report 86-1. Sacramento, CA: California Department of Fish and Game.
- Williams, D.F. et al., 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. U.S. Fish and Wildlife Service, Portland, Oregon.
- Woodbridge, B., 1998. Swainson's Hawk (*Buteo swainsoni*). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight.
- Zeiner, D.C., Laudenslayer, W. F., Mayer, K. E., and White, M., eds. 1990a. California's Wildlife, Volume II, Birds. California Statewide Wildlife Habitat Relationships System. Calif. Dept. Fish and Game, Sacramento, CA. Data available online at: <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>
- Zeiner, D.C., W. F. Laudenslayer, Jr., K.E. Mayer, and Marshall White, Editors. 1990b. California's Wildlife, Volume III Mammals. California Statewide Wildlife Habitat Relationships System. Calif. Dept. Fish and Game, Sacramento, CA. Data available online at: <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>

4.5 Cultural Resources

The assessment of project impacts on cultural resources under CEQA (CEQA Guidelines, Section 15064.5) is a two-step process: (1) determine whether the project site contains cultural resources (defined as prehistoric archaeological, historic archaeological, or historic architectural resources), and, if the project site is found to contain a cultural resource(s), then (2) determine whether the project would cause a substantial adverse change to the resource. Paleontology is also discussed within the cultural resources section, even though fossil resources may be more closely associated with aspects of geology and biology.

Cultural resources are defined as prehistoric and historic sites, structures, and districts, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious or any other reason. For analysis purposes, cultural resources may be categorized into three groups: archaeological resources, historic resources, and contemporary Native American resources.

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric-era (before the introduction of writing in a particular area) or historic-era (after the introduction of writing). The majority of such places in California are associated with either Native American or Euro-American occupation of the area. The most frequently encountered prehistoric or historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic-era archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

Historic resources are standing structures of historic or aesthetic significance that are generally 50 years of age or older (i.e., anything built in the year 1958 or before). In California, historic resources considered for protection tend to focus on architectural sites dating from the Spanish Period (1529-1822) through the early years of the Depression (1929-1930), although there has been recent attention paid to WWII and Cold War era facilities. Earlier historic resources are often associated with archaeological deposits of the same age.

Contemporary Native American resources, also called ethnographic resources, can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values. These locations are sometimes hard to define and traditional culture often prohibits Native Americans from sharing these locations with the public.

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints from a

previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

4.5.1 Setting

Setting information is drawn primarily from the project-specific cultural resources technical report prepared by Pacific Legacy, Inc. (Armstrong and Jackson, 2008).

Environmental Setting

Much of the study area lies in the fertile southern San Joaquin Valley, characterized by numerous river channels, alluvial plains, old lakebeds, and marshes. Until the reclamation projects of the past century, the San Joaquin Valley alone once supported more than 5000 square kilometers of wetlands (Moratto, 1984). The largest of these were ancient Tulare and Buena Vista Lakes.

Several major vegetation communities are found within the study area: Valley Oak Woodland on the valley floor; Blue Oak Woodland on the slopes; Great Valley Oak Riparian Forest on the margins of streams and rivers; and Valley Needlegrass Grassland. These vegetation communities would have provided a wide range of plant and animal resources for the prehistoric inhabitants of the valley. Tule would have been a vital resource, providing the raw material for baskets, rafts, and mats for the roofs of dwellings. Cattail roots and blossoms, grass nuts, and various seeds and bulbs were important food sources. Trout, squawfish, and suckerfish were found in rivers and streams. Birds included quail, dove, blackbirds, hawks, and perhaps condors. Cottontail, black bear and grizzly bear, mule deer, and the occasional elk were prominent game mammals.

Cultural Resource Setting

Prehistoric Context

The prehistory of the study area can be divided into three major periods: Early Holocene (12,000-7,000 Before Present [B.P.]); Middle Holocene (7,000-4,000 B.P.); and Late Holocene (4,000-150 B.P.), which is further subdivided into Late Holocene I (4,000-2,000 B.P.), Late Holocene II (2,000-1,100 B.P.), and Late Holocene III (1,100-150 B.P.). Each period is described briefly below.

Early Holocene (12,000-7,000 B.P.)

Evidence of human occupation of the region dates back as far as 12,000 B.P. Subsistence in the region was supported by ample resources provided by the numerous rivers and streams, as well as the now-dry Tulare and Buena Vista Lakes. Early Holocene inhabitants were hunters and gatherers, organized in small bands. Material remains of Early Holocene sites, such as stone tools, bone, and lithic debris found at small sites, is reflective of this mobile lifestyle. There is little evidence of Late Pleistocene/Early Holocene big game hunting in the region.

Middle Holocene (7,000-4,000 B.P.)

There are few sites in the region that date to the Middle Holocene. Those that do exist are characterized by handstones and milling stones, indicating an increased reliance on the gathering and processing of plant foods. Sites are generally found along lakeshores. The lack of sites may not, however, indicate an absence of prehistoric habitation during the Middle Holocene; rather, it may be due to fluctuating lake levels and alluviation that may have obscured archaeological evidence from this period.

Late Holocene (4,000-150 B.P.)

While the Middle Holocene was characterized by a warm, dry, climate, the Late Holocene began with a climatic shift to cooler, wetter conditions. During the Late Holocene I (4,000-2,000 B.P.), inhabitants were organized into generally mobile foraging groups, living in seasonal campsites. As with earlier periods, habitation sites tended to be concentrated on lakeshores, due to the presence of water and plant resources. During the Late Holocene II (2,000-1,100 B.P.), lakeshores appear to have been abandoned. However, during the Late Holocene III (1,100-150 B.P.) people returned to the lakes, making more permanent settlements along the shores. This is the most archaeologically visible period in the region, and its archaeological deposits are characterized by freshwater mussel shell and Olivella shell beads, and midden deposits, cemeteries, and house pits.

Ethnographic Context

The study area was historically inhabited by the San Joaquin Valley Yokuts, particularly the Talumne, Wolasi, Gawia, Yokod, and Wukchumni Yokuts (Wallace, 1978:448). Several historic Yokut villages were located in the area, including Yokodo, located near Exeter, south of the Proposed Project alignment, and Dawau Nawshid, located within the Proposed Project alignment.

Yokuts settlements were located on the tops of low mounds, on or near the banks of the larger watercourses. Settlements were composed of single-family dwellings, sweathouses, and ceremonial assembly chambers. Dwellings were small and lightly constructed, semi-subterranean and oval. The public structures were large and covered with earth.

Subsistence for the San Joaquin Valley Yokuts revolved around the waterways and marshes of the lower San Joaquin Valley. Fishing with dragnets, harpoons, and hook and line, yielded salmon, white sturgeon, river perch, and other species of edible fish. Waterfowl and small game attracted to the water also provided a source of protein. Vegetal staples included acorns, tule roots, and seeds.

Goods not available locally were obtained through trade. Paiute and Shoshone groups on the eastern side of the Sierra were suppliers of obsidian (volcanic glass used for tools). Shell beads and mussels were obtained from Salinan and Coastanoan groups. Trading relations with neighboring Miwok groups yielded baskets and bows and arrows. Overland transport was facilitated by a network of trails, and tule rafts were used for water transport.

Most Yokuts groups had their first contact with Europeans in the early 1800s, when the Spanish began exploring the region. The gradual erosion of Yokuts culture began during the mission

period. Epidemics of European diseases played a large role in the decimation of the native peoples, reducing the populations by 1833 to about 25 percent of their pre-epidemic numbers (Wallace, 1978). The final blow to the aboriginal population came with the Gold Rush and its aftermath. In the rush to the southern mines, native populations were pushed out of the way, and out of their existing territories. Ex-miners settling in the fertile valley applied further pressure to the native groups, and altered the landforms and waterways of the valley.

Historical Context

Spanish explorers and missionaries made up the earliest Euro-American presence in the study area. Lieutenant Gabriel Moraga was the first European to explore what is now the interior valley of California. In 1808 Moraga explored the Central Valley in order to scout for potential future mission sites and pursue neophytes that had escaped from the coastal missions.

Euro-American trappers, including Jedediah Strong Smith, entered the region in the 1820s, attracted by the fur-bearing animals that inhabited the Central Valley. Prior to the Gold Rush, the study area was devoted to grazing and hunting, as immense herds of cattle and some horses roamed the valley. With the resulting influx of population during the Gold Rush, the production of food was needed to support the mines, and the San Joaquin Valley developed to become an agricultural supplier. Some of the miners, disappointed in the search for gold, turned to farming in the fertile swamplands in the San Joaquin Valley. In 1850 California achieved statehood.

Visalia was first surveyed in 1852 and became the Tulare County seat. In 1853 the name was changed to Buena Vista, but changed back to Visalia the next year. The town of Farmersville was founded in the 1870s, and the town of Exeter in 1880. Lemon Cove was founded in 1859 and originally named Lime Kiln, in honor of the local limestone.

Historically, the study area has been used for agriculture, particularly citrus orchards. The landscape reflects this history with its many citrus groves and irrigation features, some of which date to the mid-1800s. These include the Tulare Irrigation District Canal, Pennebaker Ditch, Catron Ditch, Friant-Kern Canal, and Foothill Ditch. The Visalia Electric Railroad, which extended from Visalia to Lemon Cove, was a subsidiary of the Southern Pacific Railroad, and operated from 1906 to 1990. For most of its history, the railroad operated primarily as agriculture-related transportation.

Big Creek Hydroelectric System

The Big Creek Hydroelectric System was initiated in 1911 by Henry E. Huntington's Pacific Light & Power Corporation in order to provide electricity for much of Southern California. The system began producing power as early as 1913, and was completed in 1929. In 1917, the Big Creek Hydroelectric System was acquired by Southern California Edison (SCE) when SCE merged with Pacific Light & Power. Along the entire length of the transmission lines from Big Creek to the Eagle Rock Substation near Pasadena, 3,401 steel lattice transmission line towers were constructed: 2,214 suspension towers and 1,187 dead-end towers.

Power was transmitted to Los Angeles along 241 miles of transmission lines. At the time of its development, the Big Creek Hydroelectric System was the largest hydroelectric system in the world. The Rector Substation is one of the original substations.

Paleontological Setting

Paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

According to geologic maps, the Proposed Project and alternatives, where they cross the valley floor, primarily lay in an area of recent alluvium derived from igneous rock sources. Nearer to the foothills of the Sierra Nevada, the Proposed Project and alternatives cross Mesozoic granitic, Mesozoic basic intrusive, and pre- pre-Cenozoic granitic and metamorphic rocks. The Proposed Project and alternatives also cross Pleistocene non-marine sediment in the areas of the Valley floor nearer to the foothills (Matthews and Burnett, 1965). The Pleistocene non-marine sedimentary formations could potentially contain fossils, but a field survey by a qualified paleontologist has not been conducted along the Proposed Project or its alternatives. At present there are no known reported fossil discoveries or locations that have been reported along the Proposed Project or alternative alignments.

Cultural Resources Regulatory Setting

Federal

Section 106 (Code of Federal Regulations [CFR] 36 Part 800) of the National Historic Preservation Act (NHPA) would apply to the Proposed Project, because federal permits are anticipated to be required. Therefore, the National Register of Historic Places eligibility criteria are discussed below as they provide the basis for analyzing the significance of cultural resources.

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the NHPA of 1966, as “an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation’s historic resources and to indicate what properties should be considered for protection from destruction or impairment” (CFR 36 Section 60.2). The National Register recognizes both historical-period and prehistoric archaeological properties that are significant at the national, state, and local levels.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (U.S. Department of the Interior 1995):

- A. Are associated with events that have made a significant contribution to the broad patterns of our history;
- B. Are associated with the lives of persons significant in our past;
- C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for National Register listing (U.S. Department of the Interior 1995).

In addition to meeting the criteria of significance, a property must have integrity. Integrity is defined as “the ability of a property to convey its significance” (U.S. Department of the Interior 1995). The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

State

The State implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State’s jurisdictions.

California Register of Historical Resources

The California Register of Historical Resources (California Register) is “an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change.” (California Public Resources Code [PRC] § 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (California PRC § 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.

To be eligible for the California Register, a prehistoric or historical-period property must be significant at the local, State, and/or federal level under one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places.
- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (Those properties identified as eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, and/or a local jurisdiction register).
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological resources. CEQA is codified at Public Resources Code sec 21000 et seq. As defined in Section 21083.2 of CEQA a “unique” archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, the CEQA Guidelines recognize that certain historical resources may also have significance. The Guidelines recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site is to be treated in accordance with the provisions of CEQA Section 21083, which is a unique archaeological resource. The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5(c)(4)).

Senate Bill 18

Effective January 2005 and in conformance with Senate Bill 18, which was signed into law by the Governor of California in September 2004, on or after March 1, 2005, local governments are required to consult with tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" (OPR, 2005).

According to the *Tribal Consultation Guidelines: Supplement to General Plan Guidelines*, the contact and notification responsibilities of local governments are as follows:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code §65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code §65092).

(OPR, 2005).

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County General Plan does not include any goals, objectives, and policies related to cultural resources that would be applicable to the Proposed Project and alternatives (Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following goals and policies have been identified in the General Plan that may be applicable to the Proposed Project and alternatives:

Goal OS-J: To identify, protect, and enhance Fresno County's important historical, archeological, paleontological, geological, and cultural sites and their contributing environment.

Policy OS-J.1: The County shall require that discretionary development projects, as part of any required CEQA review, identify and protect important historical, archeological, paleontological, and cultural sites and their contributing environment from damage, destruction, and abuse to the maximum extent feasible. Project-level mitigation shall include accurate site surveys, consideration of project alternatives to preserve archeological and historic resources, and provision for resource recovery and preservation when displacement is unavoidable.

Policy OS-J.3: The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or sites of cultural importance.

Policy OS-J.8: The County shall support efforts of other organizations and agencies to preserve and enhance historic resources for educational and cultural purposes through maintenance and development of interpretive services and facilities at County recreational areas and other sites.

(Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following (goals, policies, and objectives) have been identified in the Conservation, Open Space, Recreation and Parks Element of the City of Visalia General Plan would be applicable to the Proposed Project and alternatives:

Objective: The City's primary objective is to preserve and protect historic features and archaeological resources of the Visalia Planning Area including its agricultural surroundings for aesthetic, scientific, education, and cultural values

Policy 1.5.4: Preserve archaeological sites in the Visalia Planning Area

Policy 1.5.5: Comply with State and Federal requirements for protecting archaeological resources

In addition, the City's municipal code allows resources to be placed on the City of Visalia Local Register and requires review of projects within historic districts before implementation (City of Visalia, 1989).

City of Farmersville General Plan (Proposed Project)

The Farmersville General Plan does not include any goals, objectives, and policies related to cultural resources that would be applicable to the Proposed Project (City of Farmersville, 2002).

Paleontological Resources Regulatory Setting

Federal

A variety of federal statutes specifically address paleontological resources. They are generally applicable to a project if that project includes federally owned or federally managed lands or involves a federal agency license, permit, approval, or funding. Federal legislative protection for paleontological resources stems from the Antiquities Act of 1906 (PL 59-209; 16 United States Code 431 et. seq.; 34 Stat. 225), which calls for protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands.

State

Paleontological resources are also afforded protection by CEQA. Appendix G (Part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, stating that a project will normally result in a significant impact on the environment if it will "...disrupt or adversely affect a paleontologic resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the damage or removal of paleontological resources.

Professional Standards

The Society for Vertebrate Paleontology (SVP) has established standard guidelines for acceptable professional practices in the conduct of paleontological resource assessments and surveys,

monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most California State regulatory agencies accept the SVP standard guidelines as a measure of professional practice.

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County General Plan does not include any goals, objectives, and policies related to paleontological resources that would be applicable to the Proposed Project and alternatives (Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

In addition to Goal OS-J and Policies OS-J.1, OS-J.3, and OS-J.8 above, the following goals and policies have been identified in the General Plan that may be applicable to the Proposed Project and alternatives:

Policy OS-J.9: In approving new development, the County shall ensure, to the maximum extent practicable, that the location, siting, and design of any project be subordinate to significant geologic resources.

(Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Visalia General Plan does not include any goals, objectives, and policies related to paleontological resources that would be applicable to the Proposed Project and alternatives (City of Visalia, 1989).

City of Farmersville General Plan (Proposed Project)

The Farmersville General Plan does not include any goals, objectives, and policies related to paleontological resources that would be applicable to the Proposed Project (City of Farmersville, 2002).

Methods

A cultural resource study was conducted to identify and evaluate cultural resources within the cultural resources study area in 2007 and 2008 (Armstrong and Jackson, 2008). The cultural resources assessment included a records search, archival research, pedestrian surveys, and evaluations of the built environment for the Proposed Project and alternatives.

Project Area

For the purpose of this analysis, the project area is defined as the area within 0.5 miles of the Proposed Project, alternatives, and the four substations that would be subject to modifications.

Records Search

A project-specific records search of the California Historical Resources Information System – Southern San Joaquin Valley Information Center (SSJVIC) was performed for the project area and alternatives in February 2007, January 2008 and April 2009. These records searches included an examination of previous survey coverage and reports, historic maps, and known cultural resources within a 0.5-mile radius of the Proposed Project alignment as well as Alternatives 2, 3, and 6. Other sources that were reviewed included the California Points of Historical Interest, the California Historical Landmarks, the California Register, the National Register, and the California State Historic Resources Inventory.

Native American Contact

Contact was made with the NAHC in November 2005 and April 2007, in order to request a search of their Sacred Lands File (SLF) for the Proposed Project alignment. The NAHC responded that there were no known sacred sites within the Proposed Project area. In January 2008, a search of the SLF was requested for the Proposed Project and alternatives. The NAHC responded that there were sacred sites within the project area, but could not specify whether the sites were located near the Proposed Project or an alternative. In April 2009, a search of the SLF was requested for Alternative 6. The NAHC responded that no sacred sites were located within the Alternative 6 project area.

In April 2008, SCE contacted a list of Native American contacts as suggested by the NAHC. Two contacts, Lalo Franco of the Santa Rosa Rancheria Tachi Tribe, and Kenneth Woodrow, of the Eshow Valley Band of Michahai and Wuksachi Indian, responded to the initial contact letters, expressing interest in meeting with SCE and discussing impacts to cultural resources, including a village and burial site within the project area. Mr. Woodrow toured the area with the SCE in August 2008 and expressed concern about the proximity of the Proposed Project to a possible unmarked cemetery near Cameron Creek Colony and to Rocky Hill, a place of special interest to local Native American peoples. SCE continues to coordinate Native American involvement.

Other Sources of Information

In a letter to the CPUC dated May 2008, Mary Gorden noted that the Kaweah River area was one of the most densely settled in the San Joaquin Valley in prehistoric times. The area along the Proposed Project was also densely settled during historic times. State Route 198 was the main east-west route in Tulare County and passes near a historic sawmill, the Broder Colony, Deep Creek School and Cemetery, and several irrigation ditches. Ms. Gorden also noted the presence of the Yokut village of *Dawau Nawshid* (CA-TUL-16) within the Proposed Project area, along with another ethnographic village site near Merriam Ranch. The Proposed Project, as it runs east from Lindcove, also passes along a Native American (Wukchumni) trail between the hills. Several Yokut ethnographic places are located near this portion of the Proposed Project, including the Hogwallow Preserve, a hill called *Kahchau* (“basket place”), the hill *Sananhenta’o*, several unrecorded prehistoric habitation sites, and Wukchumna Hill, a Wukchumni creation site. Ms. Gorden also emphasized the historic nature of the agricultural landscape in relation to the history of citrus growing.

On December 8, 2008, Manuel Andrade of the Archaeological Conservancy, who is the Site Steward for Rocky Hill, called to express concern about the Proposed Project's effects on Rocky Hill. He insisted that proper archaeological fieldwork be conducted prior to project construction. He was informed that archaeological fieldwork is ongoing and that the CPUC would continue to consult with all interested parties.

Archaeological Survey

A field survey was conducted for each project component in November and December 2007. Field survey consisted of an intensive pedestrian survey performed in transects of 40-50 feet for all project areas located within open and accessible terrain. The goal of this survey was to relocate any previously recorded cultural resources and identify and record any and all cultural resources within the Proposed Project and alternative alignments. Known sites were relocated and recorded. All cultural resources encountered in the field were individually recorded using GPS and assigned temporary field numbers. A Department of Parks and Recreation primary form was completed for each resource.

Where the Proposed Project and alternatives would traverse the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission line right-of-way (ROW), the survey corridor was 300 feet wide (150 feet on either side of the transmission line). For the Proposed Project and alternative alignments outside of the Big Creek 1-Rector and Big Creek 3-Rector transmission line ROW, the survey corridor was 200 feet wide (100 feet on either side of the alignment's centerline). Proposed access roads and existing, unpaved access roads were surveyed in 150 feet wide corridors. All survey corridors were surveyed by archaeologists walking parallel to each other and spaced not more than 50 feet apart.

All of the existing Big Creek 1-Rector and Big Creek 3-Rector transmission line ROW was surveyed, except for a small 0.25 mile segment south of Stokes Mountain. Portions of Alternative 3 and the majority of the alignment for the Proposed Project and Alternative 2 could not be surveyed due to lack of landowner permission to access private property. Some of Alternative 3 was characterized by extremely steep slopes and could not be surveyed safely; survey of these areas was limited to those areas that personnel could safely access. Alternative 6 has not yet been systematically surveyed because it was added as a project alternative by the EIR team after the field work had been completed.

Those portions of the Proposed Project and alternative alignments that could not be surveyed due to lack of landowner permission were subject to light reconnaissance survey. This consisted of vehicle-based survey and observation from public roads near the alignments, in order to characterize the land and record any cultural resources visible from the roadways.

Records Search and Archaeological Survey Results

Proposed Project

According to the SSJVIC records search, five cultural resources (three archaeological sites and two historic structures) were previously recorded as being within 0.5 miles of the Proposed

Project. Two of these, CA-TUL-16 and P-54-3400, may be within the alignment and could potentially be impacted by the Proposed Project. The archaeological survey crew was not able to access this area to confirm the location these sites due to lack of landowner permission.

CA-TUL-16 (the “Broder Mound”) is a large prehistoric occupation mound, about 1,200 feet in diameter, possibly the Yokut village and ancestral creation place named *Dawau Nawshid*. This village was said to have been “on the north of Cameron Creek and about four hundred yards east of the old Broder Home” (Latta 1977:190). The Broder family, who settled in that area in the 1850s, noted several hundred Yokut Indians living on the site of the mound. The site was leveled in the late 1920s, but numerous burials and artifacts were collected during a salvage excavation before the site’s destruction (Latta 1977). An estimated 800-1,000 burials were exposed during site leveling. The site was last recorded in the 1930s, and it is unknown if any of the site remains or, if so, the extent of the remaining site.

P-54-3400, the Wylie Hinds Ranch, was the site where Wylie Hinds, a freed African American slave, settled in the 1860s. Hinds became a prosperous rancher and agriculturalist and made significant contributions to the area’s fruit industry. The exact location of this site is unknown.

During the 2007 field survey, ten other cultural resources were recorded within the 200- to 300-foot-wide survey corridor, including five that are located in the Proposed Project area. These are:

- PL-30: Cameron Creek channel, levees and bridge (1951). This resource is within the existing Big Creek 1-Rector and Big Creek 3-Rector ROW;
- PL-41: Remains of a drive-in theater and parking lot (Sequoia Auto Theater; constructed in the 1950s or 1960s);
- PL-42: Tulare Irrigation Canal (date of construction unknown, but appears to have been modified in the late 20th century). This resource is within the existing Big Creek 1-Rector and Big Creek 3-Rector ROW;
- PL-44: Small segment of the Visalia Electric Railroad tracks (1908);
- PL-46: Davis Ditch (this segment constructed sometime between 1950 and 1969).

The Pacific Legacy surveyors suggest that the western unsurveyed portions of the Proposed Project are likely to contain resources related to the agricultural history of the area (historic buildings, farming facilities, railroads, debris scatters), while the eastern portion is likely to contain more prehistoric resources (bedrock mortars, rock art, midden) and should be considered more sensitive.

Alternative 2

According to the SSJVIC records search, eight cultural resources were previously recorded as being within 0.5 miles of Alternative 2. All of these previously recorded sites are prehistoric milling stations or occupational sites. None of these sites appear to be within the Alternative 2 alignment.

During the 2007 field survey, eighteen other cultural resources were recorded within the 200- to 300-foot-wide survey corridor, including fourteen that are located in the Alternative 2 alignment and may be impacted. In addition to PL-30 and PL-42, described above, these are:

- PL-1: A historic debris scatter
- PL-2: Matthews Ditch
- PL-3: Historic garage
- PL-7: St. John's River Levee
- PL-9: Watchumna Ditch
- PL-10: Mill Creek Levees
- PL-11: Prehistoric bedrock milling site
- PL-13: Prehistoric bedrock milling site
- PL-15: Remains of a historic ranch house
- PL-17: Prehistoric bedrock milling site
- PL-18: Prehistoric bedrock milling site
- PL-45: Cottonwood Creek Levee

Alternative 3

According to the SSJVIC records search, two cultural resources were previously recorded as being within 0.5 miles of Alternative 3. Both of these previously recorded sites are prehistoric milling sites. Neither of these appear to be within the Alternative 3 alignment.

During the 2007 field survey, thirty other cultural resources and two isolated artifacts were recorded within the 200- to 300-foot-wide survey corridor, including twenty-one sites that are located in the Alternative 3 alignment. In addition to PL-1, PL-2, PL-3, PL-7, PL-9, PL-10, PL-30, PL-42, and PL-45, described above, these are:

- PL-4: Sontag Ditch
- PL-5: Atchison, Topeka, and Santa Fe Railroad Grade
- PL-8: A drainage ditch
- PL-20: Hilltop soil berms of undetermined age
- PL-21: Prehistoric bedrock milling site and historic debris
- PL-22: Prehistoric bedrock milling site
- PL-23: Prehistoric bedrock milling site
- PL-26: Prehistoric bedrock milling site
- PL-28: Prehistoric bedrock milling site
- PL-29: Prehistoric bedrock milling site
- PL-33: Prehistoric bedrock milling site
- PL-35: Prehistoric bedrock milling site

Alternative 6

According to the SSJVIC records search, one cultural resource and six historic resources were previously recorded as being within 0.5 miles of Alternative 6. Cultural resource CA-TUL-1976

is a large prehistoric site with extensive bedrock milling features, midden, and pictographs. It does not appear to be within the Alternative 6 alignment. Two of the six historic resources, PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal), are within the Alternative 6 alignment. No archaeological survey has yet been conducted for Alternative 6.

Big Creek Hydroelectric System

The Proposed Project and alternatives would replace a portion of the Big Creek 1-Rector and Big Creek 3-Rector 220 kV Transmission line, and ties into the Big Creek 3-Springville 220 kV Transmission line, which are part of the Big Creek Hydroelectric System Historic District (BCHSHD). The generation and transmission facilities of the Big Creek system dating between 1911 and 1929, the period of significance for the BCHSHD, are eligible for listing in the National Register per eligibility Criteria a, b, and c (SCE, 2008). The historic transmission system has remained substantially intact along its entire 241-mile length, and even though conductors and insulators on the lines may have been changed in the past century, this has not diminished the historical integrity of the system.

Rector Substation was constructed at the same time as the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines and is part of the BCHSHD. Facilities at Rector Substation have been modernized over the years, and modifications, such as upgrading control systems or modernizing transformers and switchyard equipment, are considered part of the historic use of the substation. Therefore, the substation, particularly the main substation building and layout of the station facilities, retains adequate integrity of setting, workmanship, materials, feeling, and association to meet the California Register criteria for listing.

Historic Agricultural Landscape

The agricultural landscape, inclusive of all the orchard land on the valley floor, and contributing elements through which the Proposed Project or alternatives would be constructed, have been evaluated as eligible for listing in the California Register per Criterion 1 because of their contribution to the historic development of the California citrus industry, for which the Visalia area is known (SCE, 2008). The landscape includes citrus groves and other cultivated landscape, transportation infrastructure, and water infrastructure, as well as other historically agricultural buildings and structures. The water-transport features in the Proposed Project ROW may be eligible for listing in the California Register per Criterion 3 because some of these features were created in the context of rural cooperatives formed to construct and maintain irrigation drainage systems in the area, and they represent a type of construction distinctive to the agricultural industry that developed. In the vicinity of the Proposed Project, these features retain integrity of location, setting, materials, workmanship, feeling, and association.

The Proposed Project would be located in the vicinity of number of irrigation and water-transport structures that are essential to the agricultural industry on the east side of the San Joaquin Valley and made possible the agricultural industry in the greater Visalia area, including Tulare Irrigation District Canal, Davis Ditch, and the Cameron Creek channel and levees. Project Alternatives 2, 3, and 6 would also be located in the vicinity of these and other water transport structures, including Cottonwood Creek Levee, Mill Creek Levees, Watchumna Ditch, St John's river levee, the

Matthews Ditch and the Sontag Ditch. The agricultural landscape of the general vicinity of the Proposed Project and the alternatives can be regarded as an historic resource per CEQA, of which these water features are contributing elements. The development of transportation and water systems and related modification of the natural landscape for the planting of citrus groves has resulted in a historic landscape which date to at least the last half of the 19th century.

4.5.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, an impact resulting from the Proposed Project would be considered significant if it would cause:

- A substantial adverse change in the significance of a historical resource that is either listed or eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, or a local register of historic resources;
- A substantial adverse change in the significance of a unique archaeological resource;
- Disturbance or destruction of a unique paleontological resource or site or unique geologic feature; or
- Disturbance of any human remains, including those interred outside of formal cemeteries.

CEQA provides that a project may cause a significant environmental effect where the project could result in a substantial adverse change in the significance of a historical resource (Public Resources Code, Section 21084.1). CEQA Guidelines Section 15064.5 defines a “substantial adverse change” in the significance of a historical resource to mean physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be “materially impaired” (CEQA Guidelines, Section 15064.5[b][1]).

CEQA Guidelines, Section 15064.5(b)(2), defines that the significance of a historic resources is “materially impaired” when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

In accordance with CEQA Guidelines Section 15064.5(b)(3), a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* is considered to have mitigated impacts to historic resources to a less than significant level.

Historic resources are usually 50 years old or older and must meet at least one of the criteria for listing in the California Register (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity (CEQA Guidelines Section 15064.5[a][3]).

Finally, CEQA Section 15126.4(b)(2) states that, "(2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur." This is supported by recent CEQA case law which finds that documentation will not mitigate the loss of an historic resource to a less than significant level, and that demolition of historic resources would have a significant unmitigable impact on the environment.

4.5.3 Applicant Proposed Measures

SCE proposes the following Applicant Proposed Measure (APM) to minimize impacts to cultural resources from the Proposed Project. The impact analysis which follows in this EIR assumes that this APM would be implemented to reduce cultural resource impacts as discussed below.

APM-CUL-01: Documentation and Recordation of Affected Components of the Big Creek Hydroelectric System Historic District. SCE shall document the affected components of the BCHSHD to National Park Service Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) Level II or Level III standards prior to their removal.

4.5.4 Impacts and Mitigation Measures

Analysis Approach

Impacts on cultural resources could result from ground-disturbing activities and/or damage, destruction, or alteration of historic structures. Ground-disturbing activities include project-related excavation, grading, or other sub-surface disturbance that could damage or destroy buried archaeological resources including prehistoric and historic remains or human burials.

Mechanisms that would cause damage, destruction, or alteration of historic structures includes project-related demolition, damage, or alteration of historic structures or their immediate surroundings that could impair the significance of an historic resource or adversely alter those physical characteristics of an historical resource that convey its historical significance. Large transmission lines could also alter landscapes and viewsheds which may adversely affect the integrity of setting of some districts or historic landscapes.

Impact Mechanisms

Impacts on cultural resources could result from the following project-related activities or project design elements:

Ground-disturbing activities. Project-related excavation, grading, or other surface and sub-surface disturbance could damage or destroy buried or surficial archaeological resources including prehistoric and historic remains or human burials.

Damage, destruction, or alteration of historic structures. Project-related demolition, damage, or alteration of historic structures or their immediate surroundings could impair the significance of a historic resource or adversely alter those physical characteristics of an historical resource that convey its historical significance.

Construction of modern and large scale transmission towers. The installation of large and modern transmission poles and towers could significantly alter the historic landscape.

Impact Assessment

a) Would project implementation result in change in the significance of a historical resource as defined in §15064.5?

Impact 4.5-1: Implementation of the Proposed Project could adversely affect elements of the BCHSHD (i.e., Rector Substation and Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines), which has been determined eligible by consensus for the National Register of Historic Places and is therefore also eligible for the California Register of Historic Resources; and the Rector Substation, which is a contributing element to the BCHSHD and is considered eligible for listing on the California Register of Historic Resources. *Significant unmitigable (Class I)*

Construction of the Proposed Project within the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines ROW would require demolishing and removing approximately 26 original single-circuit lattice towers built during the BCHSHD period of significance (1911-1929). In addition, the Proposed Project would demolish and remove original Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission line towers from the Rector switchyard, install a tubular steel pole and add a pre-fabricated metal mechanical and electrical equipment room adjacent to the substation building. These proposed activities would materially alter, in an adverse manner, those physical characteristics of the resource that qualify it as eligible for inclusion in the California Register.

Implementation of **APM CUL-01** would document the adversely affected components of the BCHSHD prior to their removal which would lessen the impacts to historic resources. However, it would not reduce overall impacts to less than significant as described under CEQA Guidelines Section 151246.4(b)(2). As such these impacts would remain significant unmitigable after implementation of the Applicant Proposed Measure.

Significance after Mitigation: Significant unmitigable.

Impact 4.5-2: Implementation of the Proposed Project could adversely affect known and unknown historic resources along the Proposed Project alignment. *Less than significant with mitigation* (Class II)

There are 12 historical built resources located within 0.5 miles of the Proposed Project. Five of these, sites PL-30, PL-41, PL-42, PL-44, and PL-46, are within the existing ROW or ROW to be acquired for the Proposed Project. However, only three of these may be impacted by construction of the Proposed Project. Based on information in Chapter 2, *Project Description*, PL-30 would be within a construction set-up area and would be impacted by clearing and grading of the area. PL-41 would be impacted by clearing of a tension site. PL-44, a segment of the Visalia Electric Railroad would be impacted by the construction of a new lattice tower. PL-42, the Tulare Canal, and PL-46, the Consolidated People's Ditch, would probably not be impacted by construction of the Proposed Project due to their distance from construction activities; however, these resources should be avoided during construction, implementation, and maintenance of the transmission lines as detailed in Mitigation Measure 4.5-2a described below.

In addition, previously unknown historical resources may be present within the unsurveyed portions of the Proposed Project alignment. These portions should be surveyed prior to project commencement in order to identify and locate any cultural resources within the project area as described in Mitigation Measure 4.5-2b, below. The Pacific Legacy surveyors suggest that the western unsurveyed portions of the Proposed Project are likely to contain resources related to the agricultural history of the area (historic buildings, farming facilities, railroads, debris scatters), while the eastern portion is likely to contain more prehistoric resources (bedrock mortars, rock art, midden) and should be considered more sensitive.

Operation and maintenance of the Proposed Project would not have an adverse effect on historic resources. However, project-related construction could adversely affect known and unknown historic resources. Implementation of Mitigation Measures 4.5-2a, and 4.5-2b would reduce impacts to historic resources from construction of the Proposed Project to a less than significant level.

Mitigation Measure 4.5-2a: SCE and/or its contractors shall draft and complete a Historic Properties Treatment Plan (HPTP) in consultation with the CPUC, and the Office of Historic Preservation, prior to construction of the Proposed Project. The HPTP shall document all historic properties within the ROW of the Proposed Project and evaluate previously unevaluated properties for significance. Properties to be evaluated shall include, but are not limited to: the Big Creek Hydroelectric System Historic District; the historic agricultural landscape of the Southern San Joaquin Valley; and other known historic resources that may be impacted by project construction. The HPTP shall also address the treatment of the Historic Landscape, and describe documentation measures to record and preserve the landscape. Measures may include video or photographic recording that can be used as an educational tool for the public. For other properties found to be significant, if those resources cannot be avoided, treatment shall be detailed to lessen any adverse impacts. The HPTP shall include analysis of data in a regional context, curation of artifacts such as historic machinery (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data), and dissemination of reports to local and State repositories, libraries, and interested professionals. The HPTP

shall specify that historians, historic architects, archaeologists and other discipline specialists conducting the studies meet the Secretary's Standards (per 36 CFR 61).

Mitigation Measure 4.5-2b: Additional Cultural Resources Survey. SCE and/or its contractors shall retain a qualified archaeologist (defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology) to survey those portions of the final selected project alignment that have not been previously subjected to systematic pedestrian cultural resources survey, including areas within private ownership. Newly discovered cultural resources shall be recorded on the appropriate Department of Parks and Recreation forms. Newly discovered cultural resources that may be adversely affected shall be evaluated for significance prior to construction of the Proposed Project; resources found to be significant shall be avoided during construction. If appropriate, prior to construction, a qualified archaeologist shall mark exclusion zones around known archaeological sites that can be avoided to ensure they are not impacted by construction. If avoidance is not feasible, prior to any ground disturbing activity, a site Treatment Plan specifying additional measures such as data recovery shall be prepared and submitted to the CPUC for review prior to construction.

Significance after Mitigation: Less than Significant.

Impact 4.5-3: Implementation of the Proposed Project could alter the historic agricultural landscape of the Southern San Joaquin Valley, but not to an extent to where it would no longer be eligible for the California Register of Historic Resources. *Less than significant (Class III)*

Construction of the Proposed Project would alter the agricultural landscape of the Southern San Joaquin Valley because it would permanently remove citrus trees which are considered character-defining features of the historic agricultural landscape. The Proposed Project is not anticipated to alter other character-defining features of the agricultural landscape, such as transportation infrastructure, water infrastructure, or historically-significant agricultural buildings and structures.

The Proposed Project would permanently remove approximately 31.1 acres of Farmland, as described in Section 4.2, *Agricultural Resources*. Of this amount, 14.9 acres are currently in citrus production. Considering there are approximately 111,000 acres currently in citrus production in Tulare County (Tulare County Agricultural Commissioner, 2008), the permanent loss of this character-defining feature would represent about 0.01 percent of all citrus trees. This extremely small amount of citrus tree loss would be an imperceptible visual change from existing conditions. Considering that the vast majority of the citrus trees would remain unaffected by the Proposed Project, no significant adverse material impacts to citrus trees as a character-defining feature of the agricultural landscape of the Southern San Joaquin Valley would be anticipated. Therefore, since the agricultural landscape would remain eligible for the California Register after completion of the Proposed Project, impacts are less than significant. Also, implementation of Mitigation Measure 4.5-2a (see above) would further reduce the effects of the Proposed Project.

Mitigation: None required.

b) Would project implementation result in change in the significance of a unique archaeological resource pursuant to §15064.5?

Impact 4.5-4: Implementation of the Proposed Project could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation (Class II)*

Two archaeological resources, CA-TUL-16 and P-54-3400, could potentially be located within the Proposed Project alignment. Site CA-TUL-16 was an important prehistoric occupational mound site and is known to have contained numerous burials. P-54-3400 is the remains of a historic ranch. The exact locations of CA-TUL-16 and P-54-3400 are unknown. To determine whether these resources would be impacted by project construction, the location of the sites would have to be identified and mapped as described in Mitigation Measure 4.5-4a, below. If these resources are within the Proposed Project alignment, they could be adversely impacted by construction activities.

In addition, previously unknown archaeological resources may be present within the unsurveyed portions of the Proposed Project alignment. Implementation of Mitigation Measures 4.5-4a and 4.5-4b in addition to Mitigation Measures 4.5-2a and 4.5-2b (see above), would reduce impacts from construction of the Proposed Project to archaeological resources to less than significant. Operation and maintenance of the Proposed Project would not have an adverse effect on archaeological resources.

Mitigation Measure 4.5-4a: Identify the Locations of Known Archaeological Sites.

Prior to the commencement of project construction, SCE and/or its contractors shall re-identify and document the site locations of all previously recorded archaeological sites within the final selected project alignment, including pull and tension sites, access roads, and any other areas to be disturbed. If it is determined that a site would be impacted by project construction, the affected site(s) shall be evaluated by a qualified archaeologist (defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology) for their eligibility for listing in the California Register of Historic Resources or for their qualification as a unique archaeological resource under CEQA. If a resource is determined to be eligible, a site Treatment Plan shall be developed by a qualified archeologist in consultation with the CPUC and the SHPO. If the site evaluation results in an assessment that a resource is not eligible, no further work or protective measures shall be necessary.

Mitigation Measure 4.5-4b: Cease Work if Subsurface Archaeological Resources are Discovered During Ground-Disturbing Activities. If archaeological resources are encountered, SCE and/or its contractors shall cease all activity in the vicinity of the find until the find can be evaluated by a qualified archaeologist (an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology). If the archaeologist determines that the resources may be significant, the archaeologist shall notify the CPUC and shall develop an appropriate site Treatment Plan for the resources. The archaeologist

shall consult with Native American monitors or other appropriate Native American representatives in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric or Native American in nature.

In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, SCE shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted in accordance with the site Treatment Plan. Work may proceed on other parts of the project site while mitigation for cultural resources is being carried out.

Significance after Mitigation: Less than Significant.

c) Would project implementation directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact 4.5-5: Implementation of the Proposed Project could adversely affect paleontological resources. *Less than significant with mitigation (Class II)*

Fossil remains are found in the geologic deposits (sedimentary rock formations) within which they were originally buried. A paleontologically important deposit is one that has a high probability of producing unique, scientifically important fossils. This is determined by the abundance and densities of fossil specimens and/or previously recorded fossil sites in exposures of the deposit. Therefore, the potential paleontological sensitivity of the Proposed Project area can be assessed by identifying the paleontological importance of geologic deposits within the Proposed Project area.

According to the geologic base maps, the majority of the Proposed Project lies on recent alluvium from granitic rock sources (Matthews and Burnett, 1965). This type of soil has a low sensitivity for paleontological resources. The eastern end of the Proposed Project crosses Pleistocene non-marine sedimentary deposits and Mesozoic basic intrusive rocks, and Mesozoic granitic rocks near Lemon Cove. Granitic, basic intrusive and metamorphic rocks do not have the potential to yield fossils because the processes of their formation are not conducive to preserving biological remains. However, some possibility exists that the Pleistocene non-marine sedimentary deposits present at the eastern end of the Proposed Project could yield fossils, although fossils have not been previously recorded in this area.

Therefore, Proposed Project construction activities could result in the accidental destruction of unrecorded paleontological resources. This would be a significant impact. However, operation and maintenance of the Proposed Project would not have a significant impact to paleontological resources as disturbance to bedrock would not be required. Implementation of Mitigation Measure 4.5-5, below, would reduce construction impacts to paleontological resources to less than significant.

Mitigation Measure 4.5-5: SCE and/or its contractors shall conduct a paleontological assessment of the Proposed Project area prior to construction of the Proposed Project. The

assessment shall be completed by a paleontologist meeting the Society for Vertebrate Paleontology's standards for professional vertebrate paleontology. If sensitive paleontological resources are identified within the Proposed Project area, a Paleontological Resources Treatment and Monitoring Plan shall be developed and implemented in consultation with the CPUC.

Significance after Mitigation: Less than Significant.

d) Would project implementation disturb any human remains, including those interred outside of formal cemeteries?

Impact 4.5-6: Implementation of the Proposed Project could result in the disturbance of human remains. *Less than significant with mitigation* (Class II)

The high level of both historic and prehistoric activity in the area, evidenced by the large number of historic and prehistoric sites near or within the Proposed Project area, suggests that burials could be present. In the event that human remains were discovered during subsurface activities, the human remains could be inadvertently damaged, which could be a significant impact. However, with implementation of Mitigation Measure 4.5-6, in conjunction with Mitigation Measures 4.5-2b, 4.5-4a, and 4.5-4b, this impact would be reduced to less than significant. Operation and maintenance of the Proposed Project would not have an adverse effect on human remains as earth disturbing activities would not be required.

Mitigation Measure 4.5-6: Halt Work if Human Skeletal Remains are Identified During Construction. If human skeletal remains are uncovered during project construction, SCE and/or its contractors shall immediately halt all work, contact the Tulare County coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. If the County coroner determines that the remains are Native American, SCE shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, SCE shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the SCE has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Significance after Mitigation: Less than Significant.

4.5.5 Cumulative Impacts

The Proposed Project would add to the cumulative impacts on cultural resources in the Southern San Joaquin Valley.

As discussed above, activities associated with the construction and operation of the Proposed Project would significantly alter the BCHSHD, which would result in a significant unmitigable impact to historic resources. Impacts to other historic resources, including historic landscapes, archaeological, and paleontological resources, would be less than significant with mitigation.

The project area contains a significant archaeological and historical record that, in many cases, has not been well documented or recorded. Thus, there is the potential for ongoing and future development projects in the vicinity, particularly in and around the cities of Visalia and Farmersville, to disturb landscapes that may contain known or unknown cultural resources. The historic agricultural landscape could be particularly affected in these areas. Environmental analysis is either underway or completed for many of these projects and several are presently under construction.

The potential construction impacts of the Proposed Project, in combination with other projects in the area, could contribute to a cumulatively significant impact on cultural resources. However, Section 4.5.4 includes several mitigation measures to reduce potential project impacts to cultural resources during construction of the Proposed Project, including the creation of a Historic Properties Treatment Plan, further archaeological and historic resources surveys, further paleontological study, and provisions for the accidental discovery of cultural resources. Future projects with potentially significant impacts to cultural resources would be required to comply with federal, State, and local regulations and ordinances protecting cultural resources through implementation of similar mitigation measures during construction. Therefore, with implementation of Mitigation Measures 4.5-2a and 4.5-2b, 4.5-4a and 4.5-4b, 4.5-5 and 4.5-6, the Proposed Project would not have a cumulatively considerable contribution to impacts to archaeological and paleontological resources (Class II).

When considered in combination with other future projects, the Proposed Project's incremental contribution to impacts to the BCHSHD (i.e., the Rector Substation and the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines), even with proposed mitigation, would be considered significant unmitigable (Class I). The Proposed Project's incremental contribution to other known and unknown historic resources in the project area would not be cumulatively considerable, because impacts would be mitigated to a less than significant level through documentation and avoidance of historically-significant resources (Class II). Finally, the Proposed Project's incremental impact to the historic agricultural landscape of the Southern San Joaquin Valley by permanently removing 14.9 acres of citrus trees would be an imperceptible change to the character-defining feature of the area, and the Proposed Project would not alter other character-defining features of the agricultural landscape, such as transportation infrastructure, water infrastructure, or historically-significant agricultural buildings and structures. Consequently, the Proposed Project would not result in a cumulatively considerable impact to the historic agricultural landscape of the Southern San Joaquin Valley (Class III).

4.5.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore there would be no impacts related to Cultural Resources.

Alternative 2

Historic Resources

Impacts to the BCHSHD related to the implementation of Alternative 2 would likely be similar to those related to the Proposed Project. The first 10.8 miles of Alternative 2 would be located within the Big Creek 1-Rector 220 kV transmission line (a component of the BCHSHD) ROW. Therefore impacts to this component of the BCHSHD from implementation of Alternative 2 are anticipated to be similar to the impacts of the Proposed Project and would be significant unmitigable (Class I).

Other than the BCHSHD, nine built historic resources are within the Alternative 2 alignment, which is four more known historic resources than would be in the Proposed Project alignment.

Impact 4.5-ALT2-1: Implementation of Alternative 2 could adversely affect known and unknown historic resources along the Alternative 2 alignment. *Less than significant with mitigation* (Class II)

There are 13 historical built resources located within 0.5 miles of Alternative 2. Nine of these, PL-2 (Matthews Ditch), PL-3 (Historic garage), PL-7 (St. John's River Levee), PL-9 (Watchumna Ditch), PL-10 (Mill Creek Levees), PL-15 (Remains of a historic ranch house), PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal), and PL-45 (Cottonwood Creek Levee), are within the Alternative 2 project area.

In addition, previously unknown historical resources may be present within the unsurveyed portions of the Alternative 2 project area. These portions should be surveyed prior to project commencement in order to identify and locate any cultural resources within the project area as described in Mitigation Measure 4.5-ALT2-1b, below. The Pacific Legacy surveyors suggest that the western unsurveyed portions of Alternative 2 are likely to contain resources related to the agricultural history of the area (historic buildings, farming facilities, railroads, debris scatters), while the eastern portion is likely to contain more prehistoric resources (bedrock mortars, rock art, midden) and should be considered more sensitive.

Operation and maintenance of Alternative 2 would not have an adverse effect on historic resources. However, project-related construction could adversely affect known and unknown historic resources. Implementation of Mitigation Measures 4.5-ALT2-1a, and 4.5-ALT2-1b would reduce impacts to historic resources from construction of Alternative 2 to a less than significant level.

Mitigation Measure 4.5-ALT2-1a: Implement Proposed Project Mitigation Measure 4.5-2a.

Mitigation Measure 4.5-ALT2-1b: Implement Proposed Project Mitigation Measure 4.5-2b.

Significance after Mitigation: Less than Significant.

The historic agricultural landscape traversed by Alternative 2 is the same landscape as would be traversed by the Proposed Project. Implementation of Alternative 2 would result in the removal of approximately 10.3 acres of citrus trees. Therefore, impacts to character-defining features of the historic agricultural landscape, such as removal of citrus trees, would be similar to or slightly less than the Proposed Project and would be an imperceptible visual change from existing conditions. Considering that the vast majority of the citrus trees would remain unaffected by Alternative 2, no significant adverse material impacts to citrus trees as a character-defining feature of the agricultural landscape of the Southern San Joaquin Valley would be anticipated (Class III).

Archaeological Resources

Impacts to archaeological resources related to the implementation of Alternative 2 would be similar to or slightly greater than those related to the Proposed Project. There are five known archaeological resources within or near the Alternative 2 ROW that may be impacted, three more archaeological resource than are known to exist in the Proposed Project ROW. A greater portion of Alternative 2 runs through the more sensitive foothill areas than the Proposed Project. In addition, Alternative 2 runs through less developed land and therefore may contain a greater number of unrecorded archaeological resources.

Impact 4.5-ALT2-2: Implementation of Alternative 2 could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation* (Class II)

There are 13 archeological resources recorded within 0.5 miles of the Alternative 2 alignment. Five of these, PL-1 (historic debris scatter), PL-11 (Prehistoric bedrock milling site), PL-13 (Prehistoric bedrock milling site), PL-17 (Prehistoric bedrock milling site), and PL-18 (Prehistoric bedrock milling site), could potentially be located within the Alternative 2 project area. To determine whether these resources would be impacted by project construction, the location of the sites would have to be identified and mapped as described in Mitigation Measure 4.5-ALT2-2a, below. If these resources are within the Alternative 2 project area, they could be adversely impacted by construction activities.

In addition, previously unknown archaeological resources may be present within the unsurveyed portions of the Alternative 2 project area. Implementation of Mitigation Measures 4.5-ALT2-2a and 4.5-ALT2-2b in addition to Mitigation Measures 4.5-ALT2-1a and 4.5-ALT2-1b (see above), would reduce impacts from construction of Alternative 2 to archaeological resources to less than significant. Operation and maintenance of Alternative 2 would not have an adverse effect on archaeological resources.

Mitigation Measure 4.5-ALT2-2a: Implement Proposed Project Mitigation Measure 4.5-4a.

Mitigation Measure 4.5-ALT2-2b: Implement Proposed Project Mitigation Measure 4.5-4b.

Significance after Mitigation: Less than Significant.

Human Remains

Given the high archaeological sensitivity, the potential to encounter and impact buried human remains for Alternative 2 would be similar to or slightly greater than the Proposed Project. However, as with the Proposed Project, implementation of Mitigation Measure 4.5-6 would reduce impacts to human remains from construction of Alternative 2 to a less than significant level (Class II).

Paleontological Resources

Impacts to paleontological resources would be similar to those for the Proposed Project. Therefore, as with the Proposed Project, implementation of Mitigation Measure 4.5-5 would reduce impacts to paleontological resources from construction of Alternative 2 to a less than significant level (Class II).

Alternative 3

Historic Resources

Impacts to the BCHSHD related to the implementation of Alternative 3 would likely be similar to those related to the Proposed Project. Approximately 14.6 miles of Alternative 3 would be located within the Big Creek 1-Rector 220 kV transmission line (a component of the BCHSHD) ROW. Therefore impacts to this component of the BCHSHD from implementation of Alternative 3 are anticipated to be similar to the impacts of the Proposed Project and would be significant unmitigable (Class I).

Other than the BCHSHD, eleven built historic resources are within the Alternative 3 alignment that may be impacted by construction, which is six more known historic resources than would be in the Proposed Project alignment.

Impact 4.5-ALT3-1: Implementation of Alternative 3 could adversely affect known and unknown historic resources along the Alternative 3 alignment. *Less than significant with mitigation (Class II)*

There are 16 historical built resources located within 0.5 miles of Alternative 3. Eleven of these, PL-2 (Matthews Ditch), PL-3 (Historic garage), PL-4 (Sontag Ditch), PL-5 (Atchison, Topeka, and Santa Fe Railroad Grade), PL-7 (St. John's River Levee), PL-8 (a drainage ditch), PL-9 (Watchumna Ditch), PL-10 (Mill Creek Levees), PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal), and PL-45 (Cottonwood Creek Levee), are within the Alternative 3 project area.

In addition, previously unknown historical resources may be present within the unsurveyed portions of the Alternative 3 project area. These portions should be surveyed prior to project commencement in order to identify and locate any cultural resources within the project area as described in Mitigation Measure 4.5-ALT3-1b, below. The Pacific Legacy surveyors suggest that the western unsurveyed portions of Alternative 3 are likely to contain resources related to the agricultural history of the area (historic buildings, farming facilities, railroads, debris scatters), while the eastern portion is likely to contain more prehistoric resources (bedrock mortars, rock art, midden) and should be considered more sensitive.

Operation and maintenance of Alternative 3 would not have an adverse effect on historic resources. However, project-related construction could adversely affect known and unknown historic resources. Implementation of Mitigation Measures 4.5-ALT3-1a, and 4.5-ALT3-1b would reduce impacts to historic resources from construction of Alternative 3 to a less than significant level.

Mitigation Measure 4.5-ALT3-1a: Implement Proposed Project Mitigation Measure 4.5-2a.

Mitigation Measure 4.5-ALT3-1b: Implement Proposed Project Mitigation Measure 4.5-2b.

Significance after Mitigation: Less than Significant.

The historic agricultural landscape traversed by Alternative 3 is the same landscape as would be traversed by the Proposed Project. Implementation of Alternative 3 would result in the removal of approximately 5.4 acres of citrus trees. Therefore, impacts to character-defining features of the historic agricultural landscape, such as removal of citrus trees, would be similar to or slightly less than the Proposed Project and would be an imperceptible visual change from existing conditions. Considering that the vast majority of the citrus trees would remain unaffected by Alternative 3, no significant adverse material impacts to citrus trees as a character-defining feature of the agricultural landscape of the Southern San Joaquin Valley would be anticipated (Class III).

Archaeological Resources

Impacts to archaeological resources related to the implementation of Alternative 3 would potentially be greater than those related to the Proposed Project. There are nine known archaeological resources within the Alternative 3 ROW that may be impacted, which is seven more archaeological resources than are known to exist within the Proposed Project ROW. In addition, a greater portion of the Alternative 3 alignment runs through the more sensitive foothill areas and through less developed land than the Proposed Project alignment and therefore may contain a greater number of unrecorded archaeological resources.

Impact 4.5-ALT3-2: Implementation of Alternative 3 could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation* (Class II)

There are 16 archaeological resources recorded within 0.5 miles of the Alternative 3 alignment, nine of these, PL-20 (Hilltop soil berms of undetermined age), PL-21 (Prehistoric bedrock milling

site and historic debris), PL-22 (Prehistoric bedrock milling site), and PL-23, PL-26, PL-28, PL-29, PL-33, PL-35 (Prehistoric bedrock milling sites), could potentially be located within the Alternative 3 project area.

To determine whether these resources would be impacted by project construction, the location of the sites would have to be identified and mapped as described in Mitigation Measure 4.5-ALT3-2a, below. If these resources are within the Alternative 3 alignment, they could be adversely impacted by construction activities.

In addition, previously unknown archaeological resources may be present within the unsurveyed portions of the Alternative 3 project area. Implementation of Mitigation Measures 4.5-ALT3-2a and 4.5-ALT3-2b in addition to Mitigation Measures 4.5-ALT3-1a and 4.5-ALT3-1b (see above), would reduce impacts from construction of Alternative 3 to archaeological resources to less than significant. Operation and maintenance of Alternative 3 would not have an adverse effect on archaeological resources.

Mitigation Measure 4.5-ALT3-2a: Implement Proposed Project Mitigation Measure 4.5-4a.

Mitigation Measure 4.5-ALT3-2b: Implement Proposed Project Mitigation Measure 4.5-4b.

Significance after Mitigation: Less than Significant.

Human Remains

Given the high archaeological sensitivity, the potential to encounter and impact buried human remains for Alternative 3 would be similar to or slightly greater than the Proposed Project. However, as with the Proposed Project, implementation of Mitigation Measure 4.5-6 would reduce impacts to human remains from construction of Alternative 3 to a less than significant level (Class II).

Paleontological Resources

Impacts to paleontological resources would be similar to those for the Proposed Project. Therefore, as with the Proposed Project, implementation of Mitigation Measure 4.5-5 would reduce impacts to paleontological resources from construction of Alternative 3 to a less than significant level (Class II).

Alternative 6

Historic Resources

Impacts to the BCHSHD related to the implementation of Alternative 6 would likely be similar to those related to the Proposed Project. Approximately 8.1 miles of Alternative 6 would be located within the Big Creek 1-Rector 220 kV transmission line ROW (a component of the BCHSHD). Therefore impacts to this component of the BCHSHD from implementation of Alternative 6 are

anticipated to be similar to the impacts of the Proposed Project and would be significant unmitigable (Class I).

Other than the BCHSHD, two built historic resources are within the Alternative 3 alignment that may be impacted by construction, which is three fewer known historic resources than would be in the Proposed Project alignment.

Impact 4.5-ALT6-1: Implementation of Alternative 6 could adversely affect known and unknown historic resources along the Alternative 6 alignment. *Less than significant with mitigation* (Class II)

There are six historic resources located within 0.5 miles of Alternative 6. Two of these, PL-30 (Cameron Creek Channel) and PL-42 (Tulare Irrigation Canal), are historic built resources and within the Alternative 6 ROW. In addition, previously unknown historical resources may be present within the Alternative 6 ROW, which has not been surveyed for cultural resources. The alignment should be surveyed prior to project commencement in order to identify and locate any cultural resources within the project area as described in Mitigation Measure 4.5-ALT6-1b, below.

Operation and maintenance of Alternative 6 would not have an adverse effect on historic resources. However, project-related construction could adversely affect known and unknown historic resources. Implementation of Mitigation Measures 4.5-ALT6-1a, and 4.5-ALT6-1b would reduce impacts to historic resources from construction of Alternative 6 to a less than significant level.

Mitigation Measure 4.5-ALT6-1a: Implement Proposed Project Mitigation Measure 4.5-2a.

Mitigation Measure 4.5-ALT6-1b: Implement Proposed Project Mitigation Measure 4.5-2b.

Significance after Mitigation: Less than Significant.

The historic agricultural landscape traversed by Alternative 6 is the same landscape as would be traversed by the Proposed Project. Implementation of Alternative 6 would likely result in permanent removal of a greater number of citrus crops than the Proposed Project. Therefore, impacts to character-defining features of the historic agricultural landscape, such as removal of citrus trees, would be similar to or slightly greater than the Proposed Project. Similar to the Proposed Project, there would be an imperceptible visual change from existing conditions. Considering that the vast majority of the citrus trees would remain unaffected by Alternative 6, no significant adverse material impacts to citrus trees as a character-defining feature of the agricultural landscape of the Southern San Joaquin Valley would be anticipated (Class III).

Archaeological Resources

Impacts to archaeological resources related to the implementation of Alternative 6 would be similar to or slightly greater than those related to the Proposed Project. There is one known archaeological resource within 0.5 miles of the Alternative 6 ROW. This resource, CA-TUL-

1976, is not within the Alternative 6 ROW. However, most of the Alternative 6 alignment has never been archaeologically surveyed, and a greater portion of Alternative 6 runs through the more sensitive foothill areas than the Proposed Project. In addition, Alternative 6 runs through less developed land and therefore may contain a greater number of unrecorded archaeological resources.

Impact 4.5-ALT6-2: Implementation of Alternative 6 could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation (Class II)*

While no archaeological resources are present within the Alternative 6 alignment, one resource, CA-TUL-1976, lies less than 0.5 miles from the alignment. In addition, previously unknown archaeological resources may be present within the Alternative 6 alignment, which has not been surveyed for cultural resources. Implementation of Mitigation Measures 4.5-ALT6-2a and 4.5-ALT6-2b in addition to Mitigation Measures 4.5-ALT6-1a and 4.5-ALT6-1b (see above), would reduce impacts from construction of Alternative 6 to archaeological resources to less than significant. Operation and maintenance of Alternative 6 would not have an adverse effect on archaeological resources.

Mitigation Measure 4.5-ALT6-2a: Implement Proposed Project Mitigation Measure 4.5-4a.

Mitigation Measure 4.5-ALT6-2b: Implement Proposed Project Mitigation Measure 4.5-4b.

Significance after Mitigation: Less than Significant.

Human Remains

Given the high archaeological sensitivity, the potential to encounter and impact buried human remains for Alternative 6 would be similar to or slightly greater than the Proposed Project. However, as with the Proposed Project, implementation of Mitigation Measure 4.5-6 would reduce impacts to human remains from construction of Alternative 6 to a less than significant level (Class II).

Paleontological Resources

Impacts to paleontological resources would be similar to or slightly greater than those for the Proposed Project. However, as with the Proposed Project, implementation of Mitigation Measure 4.5-5 would reduce impacts to paleontological resources from construction of Alternative 6 to a less than significant level (Class II).

References – Cultural Resources

- Armstrong, Matthew, and Thomas Jackson, 2008. *Cultural Resource Inventory of the Southern California Edison Company Cross Valley Transmission Project*, Tulare County, California, prepared for Southern California Edison Company, April 2008.
- City of Farmersville, 2002. *Farmersville General Plan*, Adopted November 2002.
- City of Visalia, 1989. *Visalia General Plan, Conservation, Open Space, Recreation and Parks Element*, June 1989.
- Fresno County, 2000. *Fresno County General Plan, Open Space and Conservation Element*, October 2000.
- Governor's Office of Planning and Research (OPR), 2005. *Tribal Consultation Guidelines: Supplement to General Plan Guidelines*. State of California, Sacramento.
- Gorden, Mary, 2008. *Protest and Request for a Hearing*, protest letter addressed to the CPUC, A.08-5-39, May 30, 2008.
- Latta, Frank F., 1977. *Handbook of Yokuts Indians*, Second Edition, Bear State Books, Santa Cruz, California.
- Matthews, R.A., and J.L. Burnett, 1965. *Geologic Map of California: Fresno Sheet*, California Division of Mines and Geology
- Moratto, M.J., 1984. *California Archaeology*, Smithsonian Press, San Diego, CA.
- Southern California Edison Company. 2008. *Proponent's Environmental Assessment San Joaquin Cross Valley Loop Project*. Filed May 30, 2008.
- Tulare County, 2001. *County of Tulare General Plan Policy Summary*. December 2001.
- Tulare County Agricultural Commissioner, 2008. *2007 Tulare County Annual Crop and Livestock Report*. Published April 2008. Available at: <http://agcomm.co.tulare.ca.us/pdf/2007%20Crop%20Report.pdf>. Accessed on November 12, 2008.
- U.S. Department of the Interior, 1995. National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, National Park Service, Washington, DC.
- Wallace, W. J. 1978. "Southern Valley Yokuts." *Handbook of North American Indians*, Volume 8, California, Robert F. Heizer, volume editor, Pp.448-461, Washington, Smithsonian Institution.

4.6 Geology, Soils, Seismicity, and Mineral Resources

This section describes existing conditions in the study area and evaluates the potential for the Proposed Project and alternatives to result in significant impacts related to exposing people or structures to unfavorable geologic hazards, soils, seismic conditions or to impact known mineral resources.

4.6.1 Setting

Regional Geology

The study area is located along the southeasterly margin of the Great Valley geomorphic province, with easterly portions of the study area encroaching into the foothills of the Sierra Nevada province. The Great Valley and the Sierra Nevada are two of 11 geomorphic provinces recognized in California. Each province displays unique, defining features based on geology, faults, topographic relief and climate (California Geological Survey [CGS], 2002). The Great Valley is an alluvial plain approximately 50 miles wide and 400 miles long in the central part of California. The Great Valleys' northern part is the Sacramento Valley, drained by the Sacramento River and its southern part is the San Joaquin Valley, which is drained by the San Joaquin River. The Proposed Project would be located in the San Joaquin Valley. The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic (approximately 160 million years ago). The Sierra Nevada is a tilted fault block nearly 400 miles long. Its east face is a high, rugged multiple scarp, contrasting with the gentle western slope that disappears under sediments of the Great Valley. Deep river canyons are cut into the western slope. Their upper courses, especially in massive granites of the higher Sierra, are modified by glacial sculpturing, forming such scenic features as Yosemite Valley. The high crest culminates in Mount Whitney with an elevation of 14,495 feet above mean sea level (MSL) near the eastern scarp (CGS, 2002).

Faults

The nearest active faults, based on the establishment of State of California Earthquake Fault Zones, are the Pond (or Pond Poso Creek), Kern Front, New Hope, and Premier faults, located approximately 40 miles south of the study area. This is a group of aseismic faults with historic ground rupture attributed to fluid (oil and water) withdrawal rather than tectonic activity. The active Independence fault is located approximately 48 miles east of the study area and is capable of generating an earthquake of up to magnitude 7.1 (United States Geological Survey [USGS]/CGS, 2002). The widely known San Andreas Fault is located approximately 70 miles southwest of the study area. A northwest-trending, unnamed, obscured (buried) fault is mapped as crossing the easterly portion of the Proposed Project and Alternatives 2, 3 and 6 northeast of the City of Visalia (Jennings, 1994). There are no indications that this fault is active or a potential seismic source. Table 4.6-1, below, lists active faults and significant seismic sources within approximately 100 kilometers (km) (62 miles) of the Proposed Project.

**TABLE 4.6-1
PRINCIPAL ACTIVE FAULTS/SIGNIFICANT SEISMIC SOURCES**

Fault	Distance from Fault to the Proposed Project (miles)	Maximum Moment Magnitude (M)
Great Valley Segment 14	45	6.4
Independence	47	7.1
Great Valley Segment 13	52	6.5
Owens Valley	54	7.6
So. Sierra Nevada	58	7.3
Great Valley Segment 12	61	6.3

NOTES: The reported potential magnitudes are Maximum Moment Magnitudes rather than Richter Scale Magnitudes, a scale that is generally no longer used.

SOURCE: Blake, 2001.

Soils

From an agricultural perspective, based on Soil Survey information from the United States Department of Agriculture, soils classified as a loam, sand loam or silt loam primarily underlie the study area (USDA, 2008). A loam is friable soil containing a relatively equal mixture of sand and silt and a somewhat smaller portion of clay. The mixture of sand and finer grained materials in loamy soils generally reduces the erodibility of those soils. Alluvium is the primary parent material of the agricultural soils delineated in the study area.

From a geotechnical engineering perspective, soils can refer to the surficial materials that overlie geologic formational materials or bedrock. Typical designations for these surficial materials include alluvium, topsoil, fill, slope wash or other mass wasted materials such as landslide debris. Soils can be in a relatively loose or unconsolidated condition and as such are susceptible to consolidation and settlement with the addition of structural loads.

Local Geology, Drainage, and Groundwater

A geologic map published by the CGS (formerly the California Division of Mines and Geology [Mathews and Burnett, 1965]) indicates that the westerly part of the Proposed Project is underlain by recent (Holocene-age [less than approximately 10,000 years old]) alluvial fan deposits comprising part of the sediments of the Great Valley. The deposits are sediments laid down from streams flowing from the highlands to the east. The primary constituents of the deposits are sand and silt derived from metamorphic and igneous rocks of the Sierra Nevada. The eastern part of the Proposed Project alignment is mapped primarily as Pleistocene- age (less than approximately 2,000,000 years old) non-marine sedimentary deposits consisting of older alluvium and dissected alluvial fan deposits. The Pleistocene non-marine deposits have a composition and origin similar to the recent alluvial fan deposits underlying the western part of the Proposed Project alignment. In addition, in the easternmost portions of the alignment, granitic rock associated with the Sierra Nevada is mapped. The granitic rock is an intrusive igneous rock that crystallized from molten magma and comprises the bulk of the Sierra Nevada that was emplaced mostly during the Mesozoic Era, some 65 to 230 million years ago.

Alternative 2 is also mapped as being primarily underlain by Holocene and Pleistocene (together the Quaternary period) alluvial deposits. In addition, the eastern part of the alignment, north of Woodlake, would cross areas mapped as metamorphic rock. The westerly north-south trending portion of Alternative 3 is also mapped as being underlain by Quaternary alluvial deposits. In the north, Alternative 3 would turn east and cross Stokes Mountain to its northeasterly terminus. Stokes Mountain and areas to the northeast are mapped primarily as granitic rock, which is generally light colored and basic igneous rock that is generally dark colored. The igneous granitic and basic rocks are relatively resistant and contribute to the relatively steep terrain in the eastern part of Alternative 3. Alternative 6 would cross geologic conditions similar to those of Alternative 2.

Westerly and central portions of the study area are in the valley crossing areas of relatively slight relief at elevations of roughly 350 to 450 feet above MSL. The easterly end of the Proposed Project is at an elevation of approximately 675 feet above MSL as it rises into the foothills. The highest elevations in the study area are near the easterly end of Alternative 3 where there are elevations around 2,000 feet above MSL. Drainage in the study area is primarily by the way of creeks, canals, and the Kaweah River which generally drain to the west-southwest. A review of well data, indicates that groundwater in the valley portions of the study area is generally at depths of less than 100 feet, with some areas with groundwater at depths of less than 50 feet, particularly near areas where surface water is present (California Department of Water Resources, 2008). Deeper groundwater levels can be expected in the easterly foothill sections of the study area.

Geologic Hazards

A geologic hazard is a geologic condition, either natural or man-made, that poses a potential danger to life and property. A discussion of possible geologic hazards in the study area is presented in the following sections.

Seismic Activity

Based on the tectonic setting and the historical record, the study area is in a region that is characterized by a relatively low level of seismicity. According to a probabilistic seismic hazard model for California peak horizontal ground accelerations having a 10 percent probability of exceedance in 50 years can be estimated to be approximately 20 percent of gravity (0.2g) which can be considered low compared to the many more seismically active areas of western California (USGS/CGS, 2002). Historical earthquakes of magnitude 6.0 or greater with epicenters within approximately 100 km (62 miles) of the study area are shown in Table 4.6-2.

**TABLE 4.6-2
HISTORICAL EARTHQUAKES THAT AFFECTED THE STUDY AREA**

Date	Magnitude (M)
March 26, 1872	7.3
March 26, 1872	6.5
August 4, 1985	6.1

SOURCE: USGS, 2008.

Liquefaction

Soil liquefaction can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by relatively shallow groundwater (generally less than 50 feet) are susceptible to liquefaction. Liquefaction causes soil to lose strength and “liquefy,” triggering structural distress or failure due to the dynamic settlement of the ground or a loss of strength in the soils underneath structures.

Lateral spreading of the ground surface during an earthquake usually takes place along weak shear zones that have formed within a liquefiable soil layer. Lateral spreading has generally been observed to take place in the direction of a free-face (e.g. a retaining wall or slope).

Liquefiable conditions, should they be present in the study area, have a higher potential of occurring in the westerly portions of the alignments where relatively young, potentially loose alluvial deposits occur and in those areas where groundwater levels are less than 50 feet in depth. The actual presence and extent of liquefiable soils would be evaluated as part of the subsurface exploration program that would be required for the proper geotechnical design of the project.

Subsidence

Land subsidence is a loss in surface elevation due to removal of subsurface support on the soil structure. Subsidence is recognized as one of the most diverse forms of ground failure, ranging from small or local collapses to broad regional lowering of the earth's surface. Land subsidence associated with groundwater-level declines has been recognized in the San Joaquin Valley since the 1930s. Areas with up to 28 feet of ground subsidence in the valley have been recorded. Since the early 1970s land subsidence has continued in some locations, but has generally slowed due to reductions in groundwater pumpage and the accompanying recovery of groundwater level made possible by supplemental use of surface water for irrigation (Galloway and Riley, 2008). To a lesser extent, the extraction of fluids from oil and gas wells in the San Joaquin Valley has also contributed to land subsidence. There are no known areas of subsidence specific to the study area.

Collapsible Soils

Soil collapse, or hydro-consolidation, occurs when soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. This phenomenon typically occurs in recently deposited Holocene soils in a dry or semiarid environment, including eolian (wind blown) sands and alluvial fan and mudflow sediments deposited during flash floods. The combination of weight from a building or other structures, and an increase in surface water infiltration (such as from irrigation or a rise in the groundwater table) can initiate settlement and cause structural foundations and walls to crack. Collapsible soils, should they be present in the study area, have a higher potential of occurring in the westerly portions of the alignments where relatively young, potentially loose alluvial deposits occur. The actual presence and extent of collapsible soils would be evaluated as part of the subsurface exploration program that would be required for the proper geotechnical design of the project.

Expansive Soils

Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). When these soils swell, the change in volume can exert significant pressures on loads that are placed on them, such as buildings, and can result in structural distress and/or damage. Due to the granular nature of the soils in the study area the potential for significant amounts of expansive soils is low. However, portions of the easterly reach of Alternative 3 cross areas mapped as being underlain by basic intrusive rocks. These rocks have a higher potential for developing expansive soils. Geotechnical subsurface exploration and laboratory testing would need to be performed to evaluate actual presence of expansive soils.

Landslides

Due to slight topographic relief over much of the study area landslides are not a concern except in the easterly portions of the alternative alignments which encroach into the Sierra Nevada. Easterly parts of Alternative 3, which wrap around the upper portions of Stokes Mountain, have a potential for crossing possible landslides (or shallow failures). However, the suggestion that the arcuate, concave to the north, shape of Stokes Mountain is due to landsliding on a very large scale is not supported by the indicated geologic conditions and as noted in the MACTEC report “could be an erosional manifestation of the geologic structure of the underlying granitic and basic intrusive bedrock.” The MACTEC report also concludes that if a large, deep-seated landslide is present downslope to the north of the Stokes Mountain ridgeline that it is anticipated to be stable (MACTEC, 2007).

Existing Mineral Resources

Mineral resources in Tulare County that are considered major producing areas include sand, gravel, and crushed stone, which are used as sources for aggregate (road materials and other construction). The major sources for aggregate in the County are alluvial deposits (river beds and floodplains) and hard rock quarries. Currently, there are approximately 28 active aggregate mines in the County (Tulare County, 2008). In the study area, aggregate resource extraction operations are located predominantly along the Kaweah River, near the community of Lemon Cove, and along the Tule River between the City of Porterville and Lake Success. Both of these areas produce between 0.5 million and two million tons per year. A small aggregate production area, located north of the City of Visalia, is also located within the study area. It produces less than 0.5 million tons per year (Kohler, 2006; Chapman, 2009). The aggregate production areas all are located outside the Proposed Project and alternative project areas.

Geothermal Resources

There are no known or potential geothermal resources identified in the study area. Industrial or geothermal category operations do not exist anywhere near the study area, with the closest resources located southeast of the Proposed Project in the Sierra Foothills (Laney and Brizzee, 2003).

Regulatory Context

State

Alquist-Priolo Earthquake Fault Zoning Act

Surface rupture is the most easily avoided seismic hazard. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State geologist established regulatory zones, called “earthquake fault zones,” around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace, because many active faults are complex and consist of more than one branch. There is the potential for ground surface rupture along any of the branches. This Act will not apply to the Proposed Project or its alternatives as there are no Earthquake Fault Zones in the study area.

California Building Code

The California Building Code (CBC) has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The CBC is based on the International Building Code. The 2007 CBC is based on the 2006 International Building Code (IBC) published by the International Code Conference. In addition, the CBC contains necessary California amendments which are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

Seismic Hazards Mapping Act

The State Department of Conservation, CGS, provides guidance with regard to seismic hazards. Under the CGS Seismic Hazards Mapping Act, seismic hazard zones are to be identified and

mapped to assist local governments for planning and development purposes. The intent of the Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other types of ground failure, and other hazards caused by earthquakes. CGS Special Publication 117 Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations (CGS, 2008). This Act will not apply to the Proposed Project and alternatives as seismic hazard zones have not yet been established in Tulare County.

Surface Mining and Reclamation Act

The primary State law concerning conservation and development of mineral resources is SMARA, as amended to date. SMARA is found in the California Public Resources Code (PRC), Division 2, Chapter 9, Sections 2710, et seq.

Depending on the region, natural resources can include geologic deposits of valuable minerals used in manufacturing processes and the production of construction materials. SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits. SMARA calls for the State geologist to classify the lands within California based on mineral resource availability. In addition, the California Health and Safety Code requires the covering, filling, or fencing of abandoned shafts, pits and excavations (California Health and Safety Code Sections 24400-03). Furthermore, mining may also be regulated by local government, which has the authority to prohibit mining pursuant to its general plan and local zoning laws.

SMARA states that the extraction of minerals is essential to the continued economic well-being of the State and to the needs of society, and that reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety. The reclamation of mined lands will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land. Surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different, and reclamation operations and the specifications therefore may vary accordingly (California Public Resources Code Section 2711).

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3, and 6)

The following goals and policies identified in the Tulare County General Plan Safety Element may be applicable to the Proposed Project and alternatives:

Goal 3.A: To reduce the loss of life, and damage to or loss of personal property due to crime, fire, earthquakes, flooding and other disasters, natural and man-made.

Policy 3.A.8: Enforce Chapter 70 of the Uniform Building Code as it relates to grading.

Goal 3.M: To prevent serious injury and loss of life due to seismic activity.

Policy 3.M.4: Recommendation for site investigations: a. Landslides; b. Subsidence/Settlement; c. Flooding; and d. Local soils/geologic conditions.

Policy 3.M.5: Chapter 70 of the Uniform Building Code 1973 edition, should be adopted and enforced. To insure this, entities involved should retain on a full or part-time basis, a qualified engineering geologist to review reports and perform other functions related to implementation.

Policy 3.M.I: New construction directly astride or across known faults, or fault zones, should be prohibited. Non-structural land uses however, should not be prohibited.

Policy 3.N.2: Consideration of seismic and secondary hazard aspects in the environmental impact assessment process.

Policy 3.N.3: Seismic aspects must be addressed in the environmental reporting process.

(Tulare County, 2001).

The following policy identified in the Environmental Resources Management Element of the Tulare County General Plan may be applicable to the Proposed Project and alternatives:

Policy 6.E.13: Protection of known mineral sources should be assured by their designation on Open Space Protection Maps and consideration of their value when conflicting land uses are proposed.

(Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3, and 6)

There are not goals or policies identified in the Fresno County General Plan that would be applicable to the Proposed Project and alternatives (Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3, and 6)

The City of Visalia General Plan Safety Element adopted the Tulare County General Plan Safety Element; therefore, the goals and policies applicable to the Proposed Project and alternatives in the City's General Plan are the same goal and policies as listed above under the Tulare County General Plan (City of Visalia, 1975).

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan does not include any goals, objectives, and policies related to Geology, Soils and Mineral Resources that would be applicable to the Proposed Project (City of Farmersville, 2002).

4.6.2 Significance Criteria

The following significance criteria are adapted from and are consistent with the CEQA Guidelines, Appendix G, Environmental Checklist. In accordance with the CEQA guidelines, the Proposed Project would result in a significant impact to geology, soils, seismicity, and mineral resources if it would:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42.)
 - ii. Strong seismic ground shaking
 - iii. Seismic-related ground failure, including liquefaction
 - iv. Landslides
- b) Result in substantial soil erosion or the loss of topsoil
- c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
- f) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
- g) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.6.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE for reducing impacts on geology, soils or mineral resources.

4.6.4 Impacts and Mitigation Measures

Approach to Analysis

This impact analysis considers the potential geology, soils, seismicity, or mineral resources impacts associated with the construction, operation, and maintenance of Proposed Project including modification of the Rector, Springville, Vestal, and Big Creek 3 Substations. The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades. All substation work would occur on previously disturbed areas within the existing footprint of the substations, and the associated construction, operation and maintenance activities would have no impact with respect to geology, soils, seismicity, or mineral resources.

a.i) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Impact 4.6-1: The Proposed Project could be susceptible to ground surface rupture of an active fault which could damage proposed improvements which, in turn, could pose a hazard to nearby structures or people. *Less than significant* (Class III)

There are no active earthquake faults that are recognized or zoned by the State of California in the immediate project area. The closest active fault to the Proposed Project is more than 40 miles away. Whereas seismic activity is not limited to active faults, ground rupture is typically associated with active faults. Moreover, no Alquist-Priolo Earthquake Fault Zones have been mapped in the vicinity of the Proposed Project. Therefore, based on the location of the project components and the active faults in the region, the potential for surface fault rupture to affect the Proposed Project and pose a hazard to nearby structures or people would be minimal. Potential ground surface rupture impacts would be less than significant.

Mitigation: None required.

a.ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Impact 4.6-2: The Proposed Project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. *Less than significant* (Class III)

Ground shaking on the Proposed Project alignment could occur due to earthquakes on regional faults. However, the closest active fault to the Proposed Project is more than 40 miles away. Ground shaking due to seismic events is expected to have low to moderate intensities. According to the Probabilistic Assessment of California, the Proposed Project alignment has a 10 percent probability of exceeding a peak ground acceleration value of 0.2g in 50 years. Given the relatively low calculated peak ground acceleration and the use of current building code standards, the potential for seismic ground shaking to impact the Proposed Project would be less than significant.

Strong ground shaking could cause wires to swing and contact each other causing short-circuiting. However, observations from past earthquakes have shown that overhead transmission lines can accommodate strong ground shaking. In fact, the required separation distance to reduce wires touching in strong winds is also considered sufficient to accommodate movement associated with ground shaking. Therefore, existing design criteria for wind loads are adequate to prevent wire contact during ground shaking and thus, this impact would be less than significant.

Substation improvements and new towers and poles would be designed in accordance with the CBC and the seismic design criteria developed using the site specific seismic design criteria calculated for the substation, tower, and pole locations. Use of standard seismic engineering design criteria, and accepted construction methods would ensure that potential impacts associated with strong ground shaking at the existing substations and new pole and tower locations would be less than significant.

Mitigation: None required.

a.iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

Impact 4.6-3: The Proposed Project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. *Less than significant* (Class III)

Based on background information and the geologic field reconnaissance, the Proposed Project would not be expected to be adversely impacted by seismic-related ground failure, such as liquefaction. Regardless, soils may exist in the project area that could liquefy even at relatively low ground accelerations. Liquefaction hazards are evaluated as a standard practice in design-level geotechnical investigations such as would be conducted for the Proposed Project, and typically mitigated through standard geotechnical measures such as soil treatment or engineered fill replacement. Incorporation of recommended measures, if any, into the Proposed Project design specifications would ensure that the potential impact due to seismic-related ground failure would be reduced to less than significant levels.

Mitigation: None required.

a.iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

Impact 4.6-4: The Proposed Project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. *Less than significant* (Class III)

Background data and the geologic field reconnaissance did not indicate the presence of landslides underlying, or adjacent to, the majority of the Proposed Project alignment. Most of the Proposed Project alignment crosses land of slight topographic relief where the presence of landslides is not a design consideration. However, the easterly portion of the alignment climbs into the Sierra Nevada foothills where the stability of slopes, both under static and earthquake conditions, may

have a potential impact. Nonetheless, standard engineering construction practices, incorporation of recommendations made in design-level geotechnical investigations, and avoidance of potentially sensitive slopes, if present, would avoid or reduce potential impacts of landslides. Accordingly, the potential impact to the Proposed Project due to landslides would be less than significant.

Mitigation: None required.

b) Result in substantial soil erosion or the loss of topsoil.

Impact 4.6-5: The Proposed Project could result in substantial soil erosion or the loss of topsoil. *Less than significant with mitigation (Class II)*

Surface soil erosion and loss of topsoil could occur from soil disturbances associated with grading, work areas, pole and tower installation, and the construction and use of access roads. In cases such as this (i.e., constructed-related impacts), increased runoff or entrainment of sediment in runoff is just as much a concern as soil erosion. It is both processes (surface runoff and disturbed soils) that must be managed, and the principle concern for the Proposed Project for this issue relates more to water quality impacts than to the effect of losing topsoil as discussed in Section 4.8, *Hydrology and Water Quality*. In addition to Best Management Practices (BMPs) that would be incorporated to protect water quality, implementation of Mitigation Measure 4.8-1 would further reduce potential water quality impacts associated with proposed new roads. Moreover, implementation of Mitigation Measure 4.2-1a in Section 4.2, *Agricultural Resources*, which requires implementation of measures to reduce potential loss of topsoil, would reduce the potential for soil loss. Therefore, implementation of Mitigation Measures 4.8-1 and 4.2-1a would reduce the impact to a less-than-significant level

Mitigation Measure 4.6-5: Implement Mitigation Measure 4.8-1 and Mitigation Measure 4.2-1a.

Significance after Mitigation: Less than significant.

c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Impact 4.6-6: The Proposed Project could be located on geologic unit or soil that is unstable, or that would become unstable as a result of the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. *Less than significant (Class III)*

Lateral spreading is a phenomenon associated with liquefaction, which is discussed above, under Impact 4.6-3. Considering the relatively deep depth to groundwater in the project area, the potential for liquefaction or related lateral spreading is considered to be very low within the project area.

Subsidence in the San Joaquin Valley has occurred due to groundwater withdrawal. The Proposed Project would not be expected to contribute to subsidence because it would not involve the withdrawal of substantial subsurface groundwater. However, destabilization of natural or constructed slopes could occur as a result of construction activities. Excavation, grading, and fill operations associated with providing access to proposed pole and lattice tower locations could alter existing slope profiles making them unstable as a result of over-excavation of slope material, steepening of the slope, or increased loading. However, the effects of collapsible soils can be neutralized through proper foundation engineering for the structural improvements. Deep foundations that extend through zones of collapsible soils into competent underlying materials are a means to eliminate the effects of collapsible soils. Therefore, incorporation of geotechnical engineering recommendations, as is standard practice for a construction project of this nature, would reduce the potential for collapse or any other unstable soil conditions. The impact of potentially unstable soils would be less than significant.

Mitigation: None required.

d) Be located on expansive soil, creating substantial risks to life or property.

Impact 4.6-7: The Proposed Project could be located on expansive soil, creating substantial risk to life or property. *Less than significant (Class III)*

Shrink-swell or expansive soil behavior is a condition in which soil reacts to changes in moisture content by expanding or contracting. Expansive soils can cause structural damage particularly when concrete structures are in direct contact with the soils. Due to the granular nature of the on-site soils (primarily sands), substantial amounts of expansive soils in the project area are not likely to exist. Furthermore, the extent and potential affects of expansive soils, if present, can be explored during the geotechnical design evaluations that would be needed to properly design and construct the proposed improvements. Appropriate design features to address expansive soils may include excavation of potentially problematic soils during construction and replacement with engineered backfill, ground-treatment processes, direction of surface water and drainage away from foundation soils, and the use of deep foundations such as piers or piles. Implementation of these standard engineering methods would ensure that impacts associated with expansive soils would remain less than significant.

Mitigation: None required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

The Proposed Project would not include any components that would include construction of any septic tank or other wastewater disposal system into soils. Accordingly, there would be no potential impact to soils in the project area from wastewater disposal (No Impact).

f) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Extraction operations exist outside the Proposed Project area. There are no known economically viable sources of rock materials in the immediate project area. In addition, there are no known unique geologic features identified within the project area. Therefore, the potential for the Proposed Project to result in the loss of mineral or unique geologic features is low and there would be no impact (No Impact).

g) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The activities from the Proposed Project, including lattice tower replacement, new pole/tower installation, and substation upgrades, would affect only a small area. The Proposed Project would not be located in an area currently used to extract known mineral resources. Therefore, the Proposed Project would not result in the loss of availability of locally-important minerals (No Impact).

4.6.5 Cumulative Impacts

Impacts on geology and soils are generally localized and do not result in regionally cumulative impacts. Geologic conditions can vary significantly over short distances creating entirely different effects elsewhere. Other future development would be constructed to the then-current standards, which could potentially exceed those of existing improvements within the region, which reduces the potential impacts to the public.

The impact of the Proposed Project on geology, soils, and mineral resources would be localized and incrementally less than significant. Therefore, the Proposed Project would not affect the immediate vicinity surrounding the project area. As discussed in Section 3.6, *Cumulative Projects*, there are no projects within the immediate vicinity of the Proposed Project. Moreover, the Proposed Project would all be constructed in accordance with the most recent version of the CBC seismic safety requirements and recommendations contained in the Proposed Project's

specific geotechnical reports. Therefore, incremental impacts to area geology and soils resulting from construction, operation and maintenance of the Proposed Project would not contribute to a cumulatively considerable impact (Class II).

4.6.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore there would be no impacts related to geology, soils, and mineral resources (No Impact).

Alternative 2

Impacts related to geology, soils, seismicity and mineral resources for Alternative 2 would be similar to the Proposed Project because, like the Proposed Project, the alignment would cross mostly relatively flat terrain underlain by similar earth materials. Due to the longer length of Alternative 2 it would likely result in a greater amount of ground disturbance than the Proposed Project, but the additional disturbance would not be substantial. Therefore, impacts to geology, soils, seismicity and mineral resources under Alternative 2 would be less than significant with mitigation (Class II).

Alternative 3

From a geology, soils, seismicity and mineral resources perspective the north-south trending portion of Alternative 3 would not differ significantly from the Proposed Project alignment because, like the Proposed Project, the alignment would cross mostly relatively flat terrain underlain by similar earth materials. Therefore impacts from construction, operations and maintenance of Alternative 3 would be similar to the Proposed Project. However, the central and easterly portions of Alternative 3 would cross relatively steep terrain in the vicinity of Stokes Mountain where there are slope stability considerations, including suspected landslides. Also, evidence of expansive clayey soils were observed in areas underlain by basic intrusive rocks (e.g., gabbro). While hillside construction could cause slope failure, these issues would be resolved through standard engineering practices (i.e., geotechnical investigation, subsurface exploration, laboratory testing, engineering analyses and design). Moreover, due to the longer length of Alternative 3 and the potential need for remedial earthwork, it would likely result in more ground disturbance than the Proposed Project. However, the greater surface disturbance would not be substantial and impacts to geology, soils, seismicity and mineral resources under Alternative 3 would be less than significant with mitigation (Class II).

Alternative 6

Impacts related to geology, soils, seismicity and mineral resources for Alternative 6 would be similar to the Proposed Project because, like the Proposed Project, the alignment would cross mostly relatively flat terrain underlain by similar earth materials. Due to the longer length of Alternative 6 it would result in more ground disturbance than the Proposed Project. However, the greater surface disturbance would not be substantial and impacts to geology, soils, seismicity and mineral resources under Alternative 6 would be less than significant with mitigation (Class II).

References – Geology, Soils, and Mineral Resources

Blake, T.F. 2001. FRISKSP (Version 4.00) A Computer Program for the Probabilistic Estimation of Peak Acceleration and Uniform Hazard Spectra Using 3-D Faults as Earthquake Sources.

California Department of Water Resources, 2008. Water Data Library, <http://well.water.ca.gov/>, accessed December 12, 2008.

California Geological Survey (CGS), 2002. California Geomorphic Provinces, Note 36.

CGS, 2008. Guidelines for Evaluating and Mitigating Seismic Hazards in California: Special Publication 117.

Chapman, Ann, 2009. Project Planner/SMARA Tulare County Regional Management Agency. Email Communication. January 7, 2009.

City of Farmersville, 2002. Farmersville General Plan, adopted November 6, 2002.

City of Visalia, 1975. *General Plan, Safety Element*, http://www.ci.visalia.ca.us/depts/community_development/planning/publications/default.asp, accessed December 3, 2008, adopted 1975.

Fresno County, 2000. *Fresno County General Plan, Health and Safety Element*, http://www2.co.fresno.ca.us/4510/4360/General_Plan/GP_Final_policy_doc/Health%20Element_rj.pdf, accessed April 22, 2009, adopted October 2000.

Galloway, D., and Riley, F.S., 2008. San Joaquin Valley, California; Largest Human Alteration of the Earth's Surface: United States Geological Survey, <http://pubs.usgs.gov/circ/circ1182/pdf/06SanJoaquinValley.pdf>, accessed in November, 2008.

Hart, E.W., and Bryant, W.A., 1997. Fault-Rupture Hazard Zones in California: California Division of Mines and Geology, Special Publication 42 (Interim Revision 2007).

Jennings, C.W., 1994. Fault Activity Map of California and Adjacent Areas with Locations and Ages of Recent Volcanic Eruptions: California Division of Mines and Geology: Geologic Data Map No. 6, Scale 1:750,000.

- Kohler, Susan L., 2006. California Geological Survey, *Aggregate Availability in California*, December 2006.
- Laney, Patrick and Julie Brizzee, 2003. Idaho National Engineering and Environmental Laboratory, *California Geothermal Resources*, November, 2003.
- MACTEC, 2007. Report of Geologic Consultation, Proposed Cross Valley Tower Alternate Location, Stokes Mountain East of Dinuba, Tulare County, California: dated October 22.
- Matthews, R.A., and Burnett, J.L., 1965. Geologic Map of California, Fresno Sheet: California Division of Mines and Geology.
- Tulare County, 2001. *General Plan Policy Summary*, available at:
http://generalplan.co.tulare.ca.us/gp_issue_summary.html, accessed April 22, 2009,
December 2001.
- Tulare County, 2008. Tulare County Resource Management Agency: Mineral Resources of Tulare County, <http://www.co.tulare.ca.us/government/rma/countywide/mineral.asp>, accessed December 30, 2008.
- United States Department of Agriculture (USDA), 2008, Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed in November and December, 2008.
- United States Geological Survey (USGS)/CGS, 2002. Probabilistic Seismic Hazard Assessment (PSHA) Model: Revised April 2003.
- USGS, 2008. National Earthquake Information Center, <http://neic.usgs.gov/neic/epic/>, accessed in September, 2008.

4.7 Hazards and Hazardous Materials

4.7.1 Setting

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.¹ In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground; thus resulting in soil and groundwater contamination. Federal and State laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The California Code of Regulations (CCR), Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

In addition to toxic substances, the CPUC generally provides information about electric and magnetic fields (EMF) in its environmental documents, including this EIR, to inform the public and decision makers. However, the CPUC does not consider EMF, in the context of CEQA, as an environmental impact because there is no agreement among scientists that EMF creates a potential health risk and because CEQA does not define or adopt standards for defining any potential risk from EMF. This section of the EIR addresses the potential for EMF interference with implanted cardiac devices (pacemakers and defibrillators). Additional information about EMF generated by transmission lines is provided in Chapter 2, *Project Description*, and in Appendix B.

Existing Environment

Existing Contamination

Environmental FirstSearch conducted a regulatory database search of sites in the vicinity of the Proposed Project corridor, that are listed on agency files for the documented use, storage, generation, or releases of hazardous materials and/or petroleum products (Environmental FirstSearch, 2008). The database search process reviews approximately 20 lists generated by federal, State, and county regulatory agencies for historically contaminated properties, and for businesses that use, generate, or dispose of hazardous materials or petroleum products in their operation. In addition, the database search reviews lists of active contaminated sites that are currently undergoing monitoring and remediation. The databases searched and reviewed by Environmental FirstSearch are listed in Table 4.7-1.

¹ State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

**TABLE 4.7-1
 REGULATORY AGENCY DATABASES ACCESSED**

Database	Type of Record	Agency
NPL	National Priority List	United States Environmental Protection Agency (USEPA)
NPL Delisted	National Priority List subset	USEPA
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	USEPA
NFRAP	Comprehensive Environmental Response, Compensation, and Liability Information System Achieved Sites	USEPA
RCRA COR ACT	Resource Conservation and Recovery Act Information System Sites	USEPA
RCRA TSD	Resource Conservation and Recovery Act Treatment, Storage, and Disposal Facilities	USEPA
RCRA GEN	Resource Conservation and Recovery Information System Generators	USEPA
Federal IC / EC	Brownfield Management System	USEPA
ERNS	Emergency Response Notification System	USEPA/Nuclear Regulatory Commission (NCR)
Tribal Lands	Indian Lands of the United States	U.S. Department of Interior / Bureau of Indian Affairs
SPILLS	RWQCB's spills, leaks, investigations, and cleanups	California Environmental Protection Agency (Cal EPA)
SWL	Solid Waste Information System	California Integrated Waste Management Board
LUST	Leaking Underground Storage Tank Listing	State Water Resources Control Board (SWRCB) / Tulare County Environmental Health
State/Tribal UST/AST	Underground and Aboveground Storage Tank Listing	SWRCB/Tulare County Environmental Health
State/Tribal IC	Deed Restricted Sites Listing	Department of Toxic Substances Control (DTSC)
SMBRPD	Site Mitigation and Brownfields Reuse Program Database	DTSC
Floodplains	100 year and 500 year floodplain boundaries	Federal Emergency Management Agency
RADON	National Radon Database	National Technical Information Service

SOURCE: Environmental FirstSearch, 2008.

The listed sites within the vicinity of the Proposed Project corridor are provided in Table 4.7-2. These sites may have been subjected (or are suspected of being subjected) to a release of hazardous materials or petroleum products that have resulted in contamination of soil and/or groundwater. The table identifies the Rector Substation as a spill site. The FirstSearch Report identified limited information about the site. However, consultation with the Regional Water Quality Control Board (RWQCB) revealed that there had been a spill of transformer oil that had contaminated soil at the site and that the constituents of concern included lead, petroleum

**TABLE 4.7-2
 HAZARDOUS MATERIALS SITES IN THE VICINITY OF THE PROPOSED PROJECT**

Site Name	Site Address	Approximate Distance and Direction to Project Corridor	Regulatory List ^b	Last update to Database and Site Status
SCE Rector Substation	28361 Road 148, Visalia, CA	0 feet (Rector Substation)	SPILLS	Not Reported
Lemon Cover Fire Station	32490 Sierra Drive, Lemon Cover	475 NE	LUST	Case Closed
Barba Residence	2490 Filbert, Exeter	1,000 SW	UST	Active
Lemon Cove Antique Mall	32396 Sierra Drive, Lemon Cover	1,100 NE	LUST	Case Closed
Frank R. Edmiston	31159 212, Exeter	1,200 NW	UST	Active
Robert J. Tucker	30937 212, Exeter	1,270 NW	UST	Active
TUL922	2300 North Gill Road, Exeter	1,480 SW	LUST	Not Reported
Casa Blanca Market	28809, Road 156, Visalia	1,530 SE	LUST	Case Closed
Kimball Toppers	16385 Avenue 296, Visalia	2,000 NE	LUST	Pollution Characterization
Hathaway S. Nursery	16013 Avenue 296, Visalia	2,000 NE	LUST	Remediation Plan
TUL177	16528 Dillon Avenue, Visalia	2,060 SW	LUST	Not Reported
TUL1056	16528 Dillon Avenue, Visalia	2,060 SW	LUST	Not Reported
TUL1008	22208 Boston Avenue, Exeter	2,320 SE	LUST	Not Reported
Lindcove Ag Field Station	22963 Carson Avenue	2,480 SW	SWL	Active
Foothill Automotive	32812 Sierra Drive, Lemon Cove	Not Reported	LUST	Case Closed

^a The distances shown represent the approximate distance to closest portion of the Proposed Project.

^b Refer to Table 4.7-1 for definitions of the regulatory lists.

SOURCE: Environmental FirstSearch, 2008.

hydrocarbons, and polychlorinated biphenyls (PCBs). The contaminated soil was excavated and disposed of during February 2003. The RWQCB indicated that the case has since been closed (RWQCB, 2008). There are 14 other hazardous materials sites within one half mile of the Proposed Project corridor. The closest which is a LUST (i.e., Leaking Underground Storage Tank) case approximately 475 feet northeast of the Proposed Project corridor in the Lemon Cove area. This site is currently closed. All of the other hazardous materials sites are at least 1,000 feet from the Proposed Project corridor (Environmental FirstSearch, 2008).

A regulatory database search was not conducted for the alternative corridors; however, the types of bulk hazardous materials currently stored and/or used in the vicinity of the alternative corridors

would most likely be petroleum hydrocarbons found in underground storage tanks, such as those at service stations; or in aboveground storage tanks, such as those that are located at farm or ranch operation centers. For example, two aboveground tanks that appear to be for storage of petroleum products are within the estimated right-of-way (ROW) for Alternative 6.

It should also be noted that the majority of the Proposed Project and alternatives would be within existing agricultural areas, where pesticides and herbicides have likely been used. Therefore, there is a possibility that residual pesticide and/or herbicide contamination may exist in the agricultural soils along the Proposed Project and alternative alignments.

Schools

There are two schools within one-quarter mile of the Proposed Project and there are no schools in the vicinity of the alternative alignments.

- Kaweah High School, Community Day School, Independent Study, and Adult Education School, located at 21215 Avenue 300, Exeter; approximately 1,000 feet west of the Proposed Project
- Sequoia Union Elementary School, located at 23958 Avenue 324, Lemon Cove; approximately 1,000 feet from the Proposed Project.

Airports

The nearest airport to any of the Proposed Project or alternative alignments is Woodlake Airport, located approximately 1.5 miles south and 2.1 miles north of Alternative 6 and the Proposed Project, respectively.

Agricultural Aerial Spaying

According to the California Agricultural Aircraft Association (CAAA) and the Federal Aviation Administration (FAA), aerial spraying (crop dusting) is conducted in the study area to control insects, weeds, and diseases (CAAA, 2008 and FAA, 2008a). The preferred method for spraying permanent crops, such as the orchards that are the dominant crop types along the Proposed Project and alternative alignments, is from the ground; however, there are certain circumstances that require spaying of permanent crops from the air, such as in the winter when orchards are too muddy to support ground based spraying activities (TCAC, 2009a and 2009b). One rancher along the Proposed Project alignment has indicated that he needs to have his citrus orchards sprayed from the air approximately once every three years due to poor conditions in the orchards for ground-based spaying (Baker, 2009).

Where electric transmission lines exist in an agricultural area, pilots fly over, beside, and even under transmission lines to spray agricultural land with various products, usually pesticides. General civic aviators are required to distance themselves from the ground or other objects by at least 500 feet. However, crop dusters operate under a waiver that allows them to travel near power lines and close to the ground surface. Crop dusters fly as low as several feet above the ground surface while spraying, sometimes at speeds in excess of 100 miles per hour (FAA,

2008b). Transmission line towers, poles, and conductors present a substantial obstacle to avoid, and therefore require additional attention from the pilots.

The high numbers of accidents associated with crop dusters can partly be attributed to flying at low altitudes and high speeds with the additional possibility of crashing into power lines, trees, towers, and sometimes buildings and mountainsides within the flight area. Many crop duster accidents are not reported unless they resulted in an injury or fatality. Of the nation-wide crop dusting crashes reported in 2008 through November, 63 percent were a direct result of having struck a power line or an associated tower/pole (FAA, 2008b).

Wildland Fire Conditions

The combination of highly flammable fuel, long dry summers, and moderate to steep slopes creates a natural hazard of wildland fires. Wildland fires can result in death, injury, economic losses, and a large public investment in fire fighting efforts. Woodlands and other natural vegetation can be destroyed resulting in the loss of timber, wildlife habitat, scenic quality, and recreation. Soil erosion, sedimentation of fisheries and reservoirs, and downstream flooding can also result. The foothill areas in the eastern and northern portion of the study area tend to have moderate volumes of fuel and have a moderate to high fire hazard (CalFire, 2005).

Wildland Fire protection services for unincorporated Tulare County are provided by the California Department of Forestry and Fire Protection (CalFire). The Tulare Unit manages nine fire stations, one air attack base, and one conservation camp (CalFire, 2005). Tulare County's Office of Emergency Services provides fire and first-responder emergency and emergency medical aid services to all unincorporated areas of the County. The Tulare County Emergency Operations Plan outlines emergency actions that would take place in the event of a major emergency. Similarly, the City of Visalia has its own fire and first-responder services and emergency plans for disaster events and provides information to the public about how to obtain help from areas outside of a disaster zone (Tulare County, 2008; City of Visalia, 2008).

Regulatory Context

Table 4.7-3 provides a brief overview of federal and State hazardous materials laws and regulations with a more detailed discussion to follow.

State

Soil Contamination

Soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste when excavated. The California Code of Regulations, Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would classify a soil as a hazardous waste.

**TABLE 4.7-3
FEDERAL AND STATE LAWS AND REGULATIONS REGARDING HAZARDOUS MATERIALS**

Hazardous Materials Management	State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans, such as Hazard Communication Plans, Hazardous Materials Business Plans, and Chemical Hygiene Plans. Laws and regulations require hazardous materials users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous materials management requirements.
Hazardous Waste Handling	The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous material waste. These laws impose "cradle-to-grave" regulatory systems that require generators of hazardous materials waste to handle it in a manner that protects human health and the environment to the extent possible. The DTSC permits and oversees hazardous materials waste treatment, long-term storage, and disposal facilities.
Hazardous Materials Transportation	The U.S. Department of Transportation (USDOT) regulates the transportation of hazardous materials between states. Within California, the state agencies with primary responsibility for enforcing federal and State regulations, and for responding to transportation emergencies, are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.
Soil and Groundwater Contamination	The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated Superfund Amendments provide the USEPA with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. The DTSC is primarily responsible for implementing California's Superfund Law.
Emergency Response	California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including Cal EPA, CHP, the California Department of Fish and Game (CDFG), the RWQCB, and the local fire department.

Hazardous Materials Management

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that businesses handling hazardous materials prepare a business plan. In January 1996, Cal EPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements: hazardous waste generators and hazardous waste on-site treatment; underground storage tanks; above ground storage tanks; hazardous materials release response plans and inventories; risk management and prevention programs; and the Unified Fire Code hazardous materials management plans and inventories. The plans are implemented at the local level, and the agency responsible for the implementation of the Unified Program is called the Certified Unified Program Agency (CUPA).

Hazardous Waste Management and Handling

Under the Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. The USEPA must approve state programs intended to

implement federal regulations. In California, the California Environmental Protection Agency (Cal EPA) and the California Department of Toxic Substances Control (DTSC), a department within Cal EPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The USEPA approved California's RCRA program, called the Hazardous Waste Control Law (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be retained by the generator for a minimum of three years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the State. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Contaminated soils and other hazardous materials removed from a site during construction or remediation may need to be handled as hazardous waste.

Hazardous Materials Transportation

The State of California has adopted the U.S. Department of Transportation regulations for the intrastate movement of hazardous materials; State regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the State and passing through the State (26 CCR). Both regulatory programs apply in California.

The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the State that can respond quickly in the event of a spill.

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking; dropped, fully loaded, onto a concrete floor; compressed from both sides for a period of time; subjected to low and high pressure; and frozen and heated alternately.

Hazardous Materials Emergency Response

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by federal, State, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES). The OES coordinates the responses of other agencies, including the USEPA, CHP, California Department of Fish and Game (CDFG), the RWQCBs, the local air pollution control districts (in this case, the San Joaquin Valley Air Pollution Control District (SJVAPCD)), and local agencies.

Pursuant to the Business Plan Law, local agencies are required to develop “area plans” for the response to releases of hazardous materials and wastes. These emergency response plans depend to a large extent on the Business Plans submitted by people who handle hazardous materials. An area plan must include pre-emergency planning and procedures for emergency response, notification, and coordination of affected governmental agencies and responsible parties, training, and follow up.

California Department of Forestry and Fire Protection

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that has an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided onsite for various types of work in fire prone areas. The Public Resources Code requirements would apply to construction activities in any areas designated by CalFire as a Wildland Area That May Contain Substantial Forest Fire Risks and Hazards pursuant to Section 4125 (LCC, 2009).

Local

Tulare County Environmental Health Division (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County Environmental Health Division’s role is to protect the health and welfare of the general public and the environment through prevention of release and control of hazardous materials and waste. The Environmental Health Division is divided into six programs: Aboveground Storage Tank (AST) Program Spill Control and Countermeasure Plan and requirements; California Accidental Release Prevention (CalARP) Program; Hazardous Materials Release Response Plans & Inventory (Business Plan); Hazardous Waste Generator and Onsite Hazardous Waste Treatment (Tiered Permit); Underground Storage Tank (UST) Program; and the Hazardous Material Inventory Requirements of Article 80 of the Uniform Fire Code (TCHHSA, 2008).

The Environmental Health Division implements the Unified Program at the local government level pursuant to Title 27, Division 1, Subdivision 4, Chapter 1. The Environmental Health Division became the CUPA in December, 1996. The Environmental Health Division is certified by the Cal EPA Secretary to implement the Unified Program specified by Health and Safety Code within Tulare County. The CUPA unifies and consolidates under one roof the various requirements for businesses handling hazardous materials, generating or treating hazardous wastes, or operating underground storage tanks. The overall goal of the CUPA is to reduce duplication of various regulatory requirements involving hazardous materials and wastes, and to simplify compliance for the regulated public (TCHHSA, 2008).

Tulare County Office of Emergency Services (Proposed Project and Alternatives 2, 3 and 6)

Tulare County's Office of Emergency Services provides fire and first-responder emergency and emergency medical aid services to all unincorporated areas of the County. The Tulare County Emergency Operations Plan outlines emergency actions that would take place in the event of a major emergency. Similarly, the City of Visalia has its own fire and first-responder services and emergency plans for disaster events and provides information to the public about how to obtain help from areas outside of a disaster zone (Tulare County, 2008; City of Visalia, 2008).

Tulare County has prepared a Multi-Hazard Functional Plan, addressing earthquakes, dam failures, flood, wildfire, war emergencies, hazardous materials incidences, aircraft crashes, and volcanic eruptions. This plan has named critical facilities to serve as evacuation centers, provide vital services, and provide emergency response. Critical facilities include hospitals, county dispatch facilities, electrical, gas, and telecommunication facilities, water storage and treatment systems, wastewater treatment systems, schools, and other government facilities. The plan also addresses evacuation routes, which include all freeways, highways, and arterials that are located outside of the 100-year floodplain. (Tulare County, 2008).

Tulare County Fire Department (Proposed Project and Alternatives 2, 3 and 6)

All applicants in the County that seek to use blasting as a method to prepare a site for construction activities must obtain a permit from the Tulare County Fire Department. Blasting contractors must provide 24-hour notice to the Department prior to blasting and the blaster must have a certificate of eligibility, and a blasting license (TCFD, 2008).

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following policies have been identified in the Tulare County General Plan Policy Summary document may be applicable to the Proposed Project and alternatives:

Policy 3.G.11: Support the following standards for use and development of areas of varying fire hazard and the County Planning Department is hereby instructed to apply the Fire Hazard Severity Scale as indicated below to proposed developments or uses within wildlands. The following minimum requirements should be met in relation to the three classes of Fire Hazard Severity as discussed within the context of the Safety Element.

- a. Extreme Hazard – extreme caution should be used in allowing development particularly in critical facilities.
- b. Moderate Hazard – strict compliance with existing state statutes and local ordinances should provide adequate fire protection.
- c. Minimum Hazard – development should be allowed, with recommendations for mitigation of hazard by Fire Warden Special conditions, even in areas of “Moderate Hazard,” may exist which may demand special and specified requirements under which development or use of the area should occur.

Policy 3.J.13: Require that proposed developments or uses in wildland areas be subject to review by local fire agencies responsible for protecting development after they are constructed. After a thorough study of the possible hazards and risks that would be associated with completion and the use of the development, the local fire agencies should require that fire prevention and possible suppressions standards be met.

(Tulare County, 2001).

Fresno County Environmental Health Division (Proposed Project and Alternatives 2, 3 and 6)

The Fresno County Environmental Health Division (FCEH) is the CUPA for Fresno County and is responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The FCEH provides oversight for projects that: require hazardous materials business plans; require California accidental release prevention plans or federal risk management plans; operate underground or aboveground storage tanks; generate hazardous waste; or have onsite treatment of hazardous waste(s)/tiered permits (FCEH, 2009).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following fire hazards and hazardous materials policies have been identified in the Fresno County General Plan Health and Safety Element that may be applicable to the Proposed Project and alternatives:

Policy HS-B.1: The County shall review project proposals to identify potential fire hazards and to evaluate the effectiveness of preventive measures to reduce the risk to life and property.

Policy HS-B.2: The County shall ensure that development in high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. Special consideration shall be given to the use of fire-resistant construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas of steep slopes.

Policy HS-B.3: The County shall require that development in high fire hazard areas have fire resistant vegetation, cleared fire breaks separating communities or clusters of structures from native vegetation, or a long-term comprehensive vegetation and fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas.

Policy HS-F.1: The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.

Policy HS-F.4: For redevelopment or infill projects or where past site uses suggest environmental impairment, the County shall require that an investigation be performed to identify the potential for soil or groundwater contamination. In the event soil or groundwater contamination is identified or could be encountered during site development, the County shall require a plan that identifies potential risks and actions to mitigate those risks prior to, during, and after construction.

(Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia has adopted the Tulare County General Plan Safety Element. Therefore, Policies 3.G.11 and 3.J.13 (See Tulare County General Plan, above) would be applicable to the Proposed Project and alternatives.

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan does not contain goals, policies, and objectives relative to hazards or hazardous materials that would be directly applicable to the Proposed Project (City of Farmersville, 2002).

4.7.2 Significance Criteria

According to Appendix G of the CEQA Guidelines and a review of other similar transmission line project review documents, a significant impact would occur if implementation of the project would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- c) Produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;

- g) Result in a substantial hazard to existing operations of agricultural aircraft.
- h) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- i) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.
- j) Result in harmful interference to the operations of cardiac pacemakers.
- k) Result in induced currents that cause harmful electric shocks.

4.7.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE for reducing impacts from hazards or hazardous materials.

4.7.4 Impacts and Mitigation Measures

Approach to Analysis

Potential hazards and hazardous materials impacts were evaluated through a review of the Proposed Project description and an understanding of the hazards and risks inherent to the project area and the materials and methods that would be used during construction, operations, and maintenance activities.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

**Impact 4.7-1: Construction would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released.
*Less than significant with mitigation (Class II)***

During Proposed Project construction activities, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be used to fuel and maintain vehicles and motorized equipment. Accidental spill of any of these substances could impact water and/or groundwater quality. Temporary bulk above-ground storage tanks and 55-gallon drums may be used for fueling and maintenance purposes. As with any liquid, during handling and transfer from one container to another, the potential for an accidental release would exist. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers, the public, as well as the environment. Therefore, since construction activities would involve use, storage, disposal, and/or transport of significant quantities of hazardous materials, impacts would be potentially significant. Implementation of Mitigation Measures 4.7-1a through 4.7-1e (see below) would reduce these impacts to a less-than-significant level.

Mitigation Measure 4.7-1a: SCE and/or its contractors shall implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 4.7-1b: SCE shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

Mitigation Measure 4.7-1c: SCE shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction.

Mitigation Measure 4.7-1d: SCE shall ensure that a Workers Environmental Awareness Program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first program. SCE shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.

Mitigation Measure 4.7-1e: SCE shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 4.7-1b), which shall be implemented during construction.

Significance after Mitigation: Less than Significant.

Impact 4.7-2. Blasting activities could pose a hazard to the public. *Less than significant with mitigation (Class II)*

Blasting activities may be required, and could pose a hazard to the public, during road construction, grading, and foundation work in some locations if rock is present. Areas where blasting would be utilized have not been determined; therefore, it is difficult to assess the potential impacts on the public that would be caused by blasting activities. As described in Chapter 2, *Project Description*, prior to blasting, a person licensed by the Federal Bureau of Alcohol, Tobacco, and Firearms would assess the area and take site measurements in order to engineer the blast for a safe and effective explosion. Furthermore, pre-blast notification would be made to the local fire department, residents, utilities, and others potentially affected by blasting operations. Although SCE has committed to taking precautions, implementation of Mitigation Measure 4.7-2 would be required to set forth appropriate performance criteria and to ensure that safety impacts associated with blasting would be reduced to less than significant.

Mitigation Measure 4.7-2: A Blasting Safety Plan for construction shall be submitted to and approved by the CPUC and Tulare County Fire Department prior to construction that includes at a minimum, the following:

- Description of means for transportation and on-site storage and security of explosives in accordance with local, State and federal regulations.
- Minimum acceptable weather conditions for blasting and safety provisions for potential stray current (if electric detonation).
- Traffic control standards and traffic safety measures (if applicable).
- Requirement for provision and use of personal protective equipment.
- Minimum standoff distances and description of blast impact zones and procedures for clearing and controlling access to blast danger.
- Procedures for handling, setting, wiring, and firing explosives. Also, procedures for handling misfires per federal code.
- Type and quantity of explosives and description of detonation device. Sequence and schedule of blasting rounds, including general method of excavation, lift heights, etc.
- Methods of matting or covering of blast area to prevent flyrock and excessive air blast pressure.
- Dust control measures in compliance with applicable air pollution control regulations (to interface with general construction dust control plan).
- Emergency Action Plan to provide emergency telephone numbers and directions to medical facilities. Procedures for action in the event of injury.
- Material Safety Data Sheets for each explosive or other hazardous materials to be used.
- Evidence of licensing, experience, and qualifications of blasters.

- Description of insurance for the blasting work.

Significance after Mitigation: Less than Significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact 4.7-3: Construction activities could release previously unidentified hazardous materials into the environment. *Less than significant with mitigation (Class II)*

It is not anticipated that construction or operation of the Proposed Project would create a significant hazard to the public due to project upset or accidental release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities are addressed under Impact 4.7-1, above. No existing contamination has been identified in the Proposed Project ROW, although a remediated spill site exists at the Rector Substation. The potential mobilization of hazardous materials at previously identified and unidentified release sites would be relatively low. However, the potential presence of residual pesticide and herbicide contamination of the soil and/or groundwater in the agricultural areas along the Proposed Project alignment represents a potentially significant impact due to the potential health hazards to construction workers and the public stemming from exposure to pesticide or herbicide contaminated soil and/or groundwater.

Pursuant to Mitigation Measure 4.7-1c (above), SCE would implement appropriate safety measures to ensure the safety of construction workers. In addition, implementation of Mitigation Measure 4.7-3a (below), which requires provisions to be implemented if any subsurface hazardous materials are identified during construction, would ensure that potential impacts associated with mobilizing hazardous materials into the environment at previously unidentified release sites would be less than significant. However, implementation of Mitigation Measure 4.7-3a may not be effective for pesticides and herbicides because these contaminants are not always readily apparent by visual or olfactory indicators. Therefore, implementation of Mitigation Measure 4.7-3b, which requires testing for residual pesticides/herbicides in agricultural areas prior to subsurface ground disturbance and, if necessary, implementation of remediation procedures, would also be required to reduce impacts to a less than significant level. For mitigation to reduce impacts related to existing contaminated groundwater, refer to Section 4.8, *Hydrology and Water Quality*.

Mitigation Measure 4.7-3a: SCE's Hazardous Substance Control and Emergency Response Plan (as required under Mitigation Measure 4.7-1b) shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of County and State agencies and primary, secondary, and final

cleanup procedures. The Hazardous Substance Control and Emergency Response Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

Mitigation Measure 4.7-3b: SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC prior to construction.

Significance after Mitigation: Less than Significant.

c) Produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact 4.7-4: Construction activities could release hazardous materials within the vicinity of existing schools. *Less than significant with mitigation (Class II)*

Kaweah High School and Sequoia Union Elementary School are both located approximately 1,000 feet (approximately 0.20 mile) from the Proposed Project ROW. Construction activities along the Proposed Project alignment would not be expected to result in releases of hazardous emissions, substances, or waste that might impact either of the schools because SCE would be required to adhere to Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2 (see above), including the development and implementation of hazardous materials best management practices, a Hazardous Substance Control and Emergency Response Plan, a Health and Safety Plan, and a Blasting Safety Plan. With implementation of Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2, the Proposed Project would result in less than significant impacts to nearby schools.

Mitigation Measure 4.7-4: Implement Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2.

Significance after Mitigation: Less than Significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Impact 4.7-5: Construction activities at Rector Substation could release residual contamination associated with the closed Rector Substation spill site into the environment. Less than significant with mitigation (Class II)

The Rector Substation, where modifications associated with the Proposed Project are proposed to occur, is a RWQCB identified hazardous waste site where a spill of transformer oil had contaminated soil with lead, petroleum hydrocarbons, and PCBs. The contaminated soil was excavated and disposed of during February 2003, and the case has since been closed. The potential for a release and mobilization of previously unidentified residual contamination during construction activities would be relatively low. However, implementation of Mitigation Measure 4.7-3a, which would require SCE to prepare and implement a Hazardous Substance Control and Emergency Response Plan, would ensure that potential hazard impacts related to the Rector Substation spill site would be minimized and would be less than significant.

Mitigation Measure 4.7-5: Implement Mitigation Measure 4.7-3a.

Significance after Mitigation: Less than Significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

No general aviation airports are located within two miles of the Proposed Project (the closest airport is Woodlake Airport, located approximately 2.1 miles from the closest portion of the Proposed Project corridor); therefore, no impact would occur (No Impact).

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

There are no known private airstrips located within two miles of the Proposed Project corridor. Accordingly, there would be no private airstrip safety hazard impacts. No impact would occur (No Impact).

g) Result in a substantial hazard to existing operations of agricultural aircraft.

Impact 4.7-6: The Proposed Project could create a safety hazard to aerial spray applicators. *Less than significant with mitigation (Class II)*

The primary reason that transmission lines and towers are a safety hazard for aerial applicators is because they present an additional obstacle for pilots to avoid. The following discussion describes the specific circumstances that present a safety hazard to aerial applicators. New transmission lines are especially hazardous when they are: diagonally oriented, relative to field boundaries; exist side-by-side with other transmission lines; create an angle perpendicular to an existing line; constructed within a new utility ROW; and when they are not clearly visible.

The Proposed Project would represent a potentially significant hazard to aerial sprayers because it would create a right angle to the existing Big Creek-Rector transmission lines within an agricultural use, and it would result in approximately 15.5 miles of new 120-foot to 160-foot poles/towers and conductors within or immediately adjacent to existing agricultural fields, orchards, and vineyards where no such structures currently exist.

Because of the infrequent nature of aerial spraying in the study area, pilots may fly over agricultural fields that they have not been to in six months or longer. In those cases, pilots could have no previous knowledge that a new transmission line and towers have been constructed, which creates an increased danger for pilots. To ensure pilot notification of the new transmission line, the following mitigation measure shall be implemented.

Mitigation Measure 4.7-6: SCE shall consult with landowners to determine which aerial applicators cover agricultural parcels within one mile of the approved transmission line ROW. SCE shall provide written notification to all aerial applicators stating when the new transmission line and towers would be erected. SCE shall also provide all aerial applicators that operate in the area recent aerial photos or topographic maps clearly showing the location of the new lines and towers, as well as all existing SCE lines and towers within 10 miles of the approved corridor. The photos or maps shall also indicate the heights of the towers and conductors. SCE shall provide documentation of compliance to the CPUC.

Significance after Mitigation: Less than Significant.

h) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact 4.7-7: Construction of the Proposed Project could interfere with an emergency response or evacuation plan. *Less than significant with mitigation (Class II)*

Several private and public roadways, including Highways 63 and 198, that would be crossed by the Proposed Project would likely need to be temporarily closed during transmission line stringing activities. These roadways could be used by people evacuating the area during an emergency.

However, implementation of Mitigation Measure 4.14-1b requires SCE and/or its contractors to coordinate all construction activities with emergency service providers in and along the Proposed Project alignment to minimize disruption to emergency vehicle access (see Section 4.14, *Transportation and Traffic*). Specific requirements are identified under Mitigation Measure 4.14-1b and 4.12-2 (see Section 4.12, *Public Services*). Implementation of these measures would ensure that potential impacts associated with an interference with an emergency response or evacuation would be mitigated to less than significant levels.

Mitigation Measure 4.7-7: Implement Mitigation Measures 4.14-1b and 4.12-2.

Significance after Mitigation: Less than Significant.

i) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact 4.7-8: Construction activities could ignite dry vegetation and start a fire. *Less than significant with mitigation (Class II)*

The eastern portion of the Proposed Project would be constructed in an open area that contains grass, bushes, and trees, which is susceptible to wildland fires. Heat or sparks from construction and/or maintenance vehicles/equipment have the potential to ignite dry vegetation and cause a fire. Therefore, depending on the time of year and location of construction and maintenance activities, a high to moderate fire hazard would likely exist during construction and maintenance of the Proposed Project. However, implementation of Mitigation Measure 4.7-8 would reduce the potentially significant wildland fire impact associated with the construction and maintenance of the Proposed Project to less than significant.

Mitigation Measure 4.7-8: SCE and/or its contractors shall have water tanks and/or water trucks sited/available in the project area for fire protection. All construction and maintenance vehicles shall have fire suppression equipment. Construction personnel shall be required to park vehicles away from dry vegetation. Prior to construction, SCE shall contact and coordinate with the California Department of Forestry (CalFire) and applicable local fire departments (i.e., Tulare County, City of Visalia, and City of Farmersville) to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SCE shall submit verification of its consultation with CalFire and the local fire departments to the CPUC.

Significance after Mitigation: Less than Significant.

Impact 4.7-9: Operation of the transmission lines could increase the probability of a wildfire. *Less than significant* (Class III)

During operations, the Proposed Project could increase the risk of wildland fires in the eastern portion of the proposed new transmission line ROW. Electrical lines can start a fire if an object, such as a tree limb, kite, Mylar balloon, etc., simultaneously contacts the transmission line conductors and a second object, such as the ground or a portion of the supporting tower; if two conductors make contact; or if dust and/or dirt builds up on insulators such that a conductive path to a portion of the tower is created.

Most of the fires resulting from electrical facilities originate from low voltage distribution facilities. The energized conductors that make up distribution and lower-voltage transmission lines are much closer together (i.e., as close as two feet) compared with higher-voltage transmission lines, such as those associated with the Proposed Project, which would be separated by as much as 18 feet. Given the relative closeness of the distribution and lower voltage transmission conductors, fallen or wind-blown tree branches and debris can more easily come into contact with and bridge two distribution conductor phases,² which can cause electrical arcs³ that can set fire to woody debris. Because higher voltage transmission line conductors are spaced much further apart, it is extremely rare for them to cause fires resulting from arcing due to fallen or wind-blown tree branches and debris. Arcing from a single conductor to ground through vegetation contact can also occur, but the conductors of the Proposed Project would generally be much further from the ground than they would be from one another, thus the chance for electrical arcing to occur would be extremely rare. To minimize the risk of trees falling on the power line or other accidental ignition of a wildland fire from the power line, SCE would follow State vegetation and tree clearing requirements, including CPUC General Order 95, Public Resources Code Section 4293.

Given proper ROW management, arcing between conductor phases is more likely than between a conductor and the ground. System component failures and accidents during maintenance activities can also cause line faults that result in arcing on transmission lines of any voltage. Distribution and transmission lines at lower voltages are also subject to conductor-to-conductor contact, which can occur when extremely high winds force two conductors on a single pole to oscillate so excessively that they contact one another. This contact can result in arcing (sparks) that can ignite nearby vegetation. Given the spacing of the conductors of the Proposed Project, the opportunity for this sort of arcing is very limited.

High powered transmission lines, such as the one that would be constructed under the Proposed Project, have protection and control systems that are designed to detect faults, such as arcing from debris contacting the line, and rapidly shut off power flow in 1/60 to 3/60 of a second. In comparison, distribution systems are designed to be more tolerant to line faults in an effort to

² Multiple conducting wires on a single transmission or distribution line are clustered in groups of three wires that carry currents alternating at different phases. This arrangement has the safety effect of cancelling much of the electric and magnetic field that would otherwise be created.

³ Electrical arcing is an electric discharge that occurs when electrons are able to jump a gap in a circuit.

limit disruption of service. Distribution line protection and control systems allow faults to last longer (in the hopes of the fault clearing) and are sometimes set to automatically reenergize a faulted line after a very brief delay (a second or so) in the event that the fault has cleared. If a fault is related to debris tangled in the conductors, immediate re-energizing can cause repeated sparks and ignite nearby vegetation. In addition, distribution lines are mounted with devices, such as transformers and capacitors, which can fail in an explosive manner resulting in an ignition of nearby vegetation. Transmission lines are not mounted with these devices because transmission lines are not used to directly serve customer loads.

Both distribution and transmission systems are designed to withstand high winds, and it is extremely rare for higher-voltage transmission structures to blow over. When this rare event does occur, the protection system on a transmission line is designed to shut off power flow in a fraction of a second. However, a fraction of a second can be enough for an energized conductor to cause sparks and ignite nearby vegetation. Distribution structure failures are also infrequent but due to their placement in narrower corridors in close proximity to trees and other tall vegetation they may be pushed down in storms by wind-blown trees.

Wildfires related to power lines can also be ignited by wildlife, particularly large birds. A bird-caused flashover (i.e., an unintended electric arc) is more probable on low-voltage distribution and transmission lines where conductors are closely spaced. Birds perched on power poles or flying between poles can simultaneously contact two conductors, causing an electrical flashover. This electrocutes the bird and occasionally causes the feathers to catch fire. The bird may fall to the ground and ignite nearby vegetation. However, bird-caused flashovers are highly unlikely to occur with the Proposed Project, with energized 220 kV conductors at minimum separation distances of 18 feet vertically and 24 feet horizontally. These distances are at least 10 feet greater than the wingspan of the largest bird species in the project vicinity (see Section 4.4, *Biological Resources*, for a complete discussion of the risk of bird electrocutions).

The risk of ignitions and the risk of damage from a Proposed Project-related ignition are low. In addition, SCE would be required to implement State vegetation and tree clearing requirements, including CPUC General Order 95, Public Resources Code Section 4293. Also, SCE would inspect all components of the proposed transmission line at least annually for corrosion, equipment misalignment, loose fittings, and other common mechanical problems, by either air or ground. Consequently, implementation of the Proposed Project would not result in a significant risk of loss, injury, or death involving wildland fires; therefore, operational impacts would be less than significant.

Mitigation: None required.

j) Result in harmful interference to the operations of cardiac pacemakers.

Impact 4.7-10: Electric fields associated with the operation of the Proposed Project could affect cardiac pacemakers, resulting in ventricular fibrillation. *Less than significant* (Class III)

The electric field associated with the proposed new transmission lines may be of sufficient magnitude to impact operation of a few older model pacemakers, thus causing the pacemaker to revert to asynchronous pacing. Cardiovascular specialists do not consider prolonged asynchronous pacing to be a problem; periods of operation in this mode are commonly induced by cardiologists to check pacemaker performance. However, with dual-chamber pacemakers, inappropriate pacing has been documented before unit reversion to asynchronous mode (EPRI, 1997).

Depending on the manufacturer and design, the magnetic field threshold for pacemaker interference, including the possibility of inappropriate pacing, is in the range of two to 12 Gauss (G), and the electric field threshold is about 1.5 kV/meter for some of the more sensitive dual-chamber units, and above two kV/m for older ventricular units (EPRI, 1997). Based on magnetic field data included in SCE's Application (SCE, 2008) and electric field data for a similar voltage transmission line (SES, 2008), it is estimated that the maximum magnetic and electric fields that would occur under the proposed transmission lines would be approximately 0.04 to 0.05 G and 2.3 kV/m, respectively.

The function of some pacemakers could be altered by exposure to electric fields that would be generated in the immediate vicinity of the Proposed Project (i.e., near the ground surface within approximately 30 feet of the transmission line centerline), potentially resulting in inaccurate detections by the pacemaker of normal cardiac signals or resulting in inappropriate behavior, until the field strength is reduced by the individual leaving the immediate area. However, the biological consequences of transient, reversible pacemaker malfunction are mostly benign because most modern units revert to a fixed-rate pacing mode, which is not harmful. There are exceptions, which include: individuals that are completely dependent on their pacemakers for maintaining all cardiac rhythms; individuals whose pacemakers function in inhibited modes where field interference could severely compromise cardiovascular function; and individuals with compromised coronary circulation who are prone to episodes of reduced cardiac blood flow (EPRI, 1997).

Such episodes that would occur at the same time that the pacing would become fixed-rate or irregular are dangerous, because these individuals would be more easily triggered into ventricular fibrillation. The precise coincidence of an individual to be exposed to high electric fields within the transmission line ROW and a biological need of that individual for the full function of his/her pacemaker would appear, in general, to be a rare event. However, given the limited data available on this potential effect, a probability of such a coincidence to occur cannot be estimated.

Given the rarity of an exposure event to occur simultaneous with a biological need for full function pacemakers, it would be unlikely that the transmission line's electric field would cause a harmful interference to the operations of implanted cardiac devices; therefore, impacts would be less than significant.

Mitigation: None required.

k) Result in induced currents that cause harmful electric shocks.

Impact 4.7-11: Induced currents associated with operation of the Proposed Project could generate electrical shocks. *Less than significant with mitigation (Class II)*

Power line fields can induce voltages and currents on conductive objects, such as metal roofs or buildings, fences, construction equipment, and vehicles. Transmission lines are designed to limit the short circuit current, from conductive items beneath the line, to a safe level (less than five milliamperes). When a person or animal comes in contact with a conductive object a perceptible current or small electric shock may occur. These small electric shocks cause no physiological harm; however, they may present a nuisance.

A more hazardous situation would exist if a tall mobile piece of equipment would be brought within the transmission line ROW in close proximity to the electrified transmission line or other electrified equipment. There are numerous existing wells that are in the proposed transmission line ROW and the potential exists that future maintenance of those wells would require the use of a boom truck or other similar rig that would be at least 35 feet tall. Per identified working clearances for power lines developed by the California Department of Industrial Relations, Division of Safety and Health (through the California Division of Occupational Safety and Health (Cal OSHA) Title 8 of Section 2946), operations of such equipment in the immediate vicinity of the energized transmission line would pose a safety hazard and would not be acceptable under the line or immediately adjacent to the line (e.g., within 17 feet of either side of the line for a 35 foot tall boom type machine).

Impacts related to electric shocks would be mitigated to a less than significant level with implementation of Mitigation Measures 4.7-11a and 4.7-11b.

Mitigation Measure 4.7-11a: As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, and pipelines, that are within and near the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.

Mitigation Measure 4.7-11b: Prior to construction, SCE shall coordinate with affected property owners to conduct an inventory of the groundwater wells that are within the proposed ROW. Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the minimum height of equipment that would be required to perform maintenance activities as well as the maximum line sag at the well locations, SCE shall identify wells that would not have the required minimum ground clearance to perform any necessary well maintenance and shall engage a qualified water well drilling contractor to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location. Abandonment of the old

wells shall be conducted in accordance with all applicable well standards (DWR, 1991). All wells shall be relocated prior to electrifying the transmission line.

Significance after Mitigation: Less than Significant.

4.7.5 Cumulative Impacts

The Proposed Project would increase the hazard potential in the project area. However, it is unlikely that the Proposed Project, combined with the other projects listed in Section 3.6, *Cumulative Projects*, would contribute to a significant cumulative hazards or hazardous materials related impact because impacts related to hazards and hazardous materials are generally site specific. Therefore, cumulative impacts would only be likely to occur with other projects that are constructed within the immediate vicinity of the Proposed Project.

Only three of the cumulative projects identified in Section 3.6, *Cumulative Projects*, would be within the immediate vicinity of the Proposed Project, including two road widening projects and a specific plan. These types of projects, combined with the Proposed Project, would not result in a cumulative impact even if all of the projects were to be constructed simultaneously. In addition, Mitigation Measures 4.7-1a through 4.7-1e, 4.7-3a, 4.7-3b, and 4.7-8 would ensure that the Proposed Project's contribution to construction-related hazards and hazardous materials cumulative impacts would be less than cumulatively considerable (i.e., because the Proposed Project's contribution to any potential cumulative impact would be site specific and would be mitigated). Therefore, cumulative impacts related to hazards and hazardous materials would be less than significant (Class II).

4.7.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no hazards or hazardous materials related impacts would occur (No Impact).

Alternative 2

Similar to the Proposed Project, construction activities associated with Alternative 2 would require mitigation to ensure that impacts associated with the routine use of hazardous materials, accidental release of hazardous materials, the release and mobilization of previously unidentified residual contamination, blasting activities, interference with an adopted emergency response plan,

and electric shock hazards would be less than significant. Therefore, implementation of Mitigation Measures 4.7-1a through 4.7-1e, 4.7-2, 4.7-3a and 4.7-3b, 4.7-7 and 4.7-11 would reduce impacts from Alternative 2 to less than significant (Class II). Under Alternative 2, these impacts would be the same as the Proposed Project.

Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 2. Therefore, no school related impacts would occur under Alternative 2 (No Impact). The Proposed Project would be more adverse compared to Alternative 2 with regard to hazards impacts to schools.

There are no general aviation airports or airstrips located within two miles of the alignment for Alternative 2; therefore, as with the Proposed Project, no impacts would occur under Alternative 2 (No Impact).

Alternative 2 would result in a shorter distance of new structures and transmission lines in existing agricultural areas where none exist currently compared to the Proposed Project. Therefore, the hazard to aerial sprayers under Alternative 2 would be slightly less severe than would occur under the Proposed Project. Therefore, this impact would remain less than significant with implementation of Mitigation Measure 4.7-6 (Class II).

As with the Proposed Project, the electric fields associated with the new transmission lines under Alternative 2 may be of sufficient magnitude to impact operation of some pacemakers. Given the rarity of an exposure event to occur simultaneous with a biological need for full function pacemakers, it would be unlikely that the transmission line's electric field would cause a harmful interference to the operations of cardiac pacemakers; therefore, impacts under Alternative 2 would be the same as those identified for the Proposed Project, less than significant (Class III).

Compared to the Proposed Project, the alignment for Alternative 2 would be located in approximately four additional miles of open area that contains grass, bushes, and trees that would be susceptible to wildfire depending on the time of year. Therefore, the construction and operational wildfire hazard would be slightly higher under Alternative 2 compared to the Proposed Project. However, implementation of Mitigation Measure 4.7-8 would reduce impacts to less than significant (Class II).

Alternative 3

Similar to the Proposed Project, construction activities associated with Alternative 3 would require mitigation to ensure that impacts associated with the routine use of hazardous materials, accidental release of hazardous materials, the release and mobilization of previously unidentified residual contamination, interference with an adopted emergency response plan, and electric shock hazards would be less than significant. Therefore, with implementation of Mitigation Measures 4.7-1a through 4.7-1e, 4.7-2, 4.7-3a and 4.7-3b, 4.7-7 and 4.7-11 these impacts would

be less than significant (Class II). Under Alternative 3, these impacts would be the same as the Proposed Project.

Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 3. Therefore, no school related impacts would occur under Alternative 3 (No Impact). The Proposed Project would be more adverse compared to Alternative 3 with regard to hazards impacts to schools.

There are no general aviation airports or airstrips located within two miles of the alignment for Alternative 3; therefore, as with the Proposed Project, no impacts would occur under Alternative 3 (No Impact).

Although Alternative 3 would result in a longer distance of replaced side-by-side towers with taller structures compared to the Proposed Project, it would result in a much shorter distance of new structures in existing agricultural areas where none exist currently compared to the Proposed Project. Therefore, the hazard to aerial sprayers under Alternative 3 is not as severe as would occur under the Proposed Project. However, Mitigation Measure 4.7-6 would still be required to reduce the impact to a less than significant level (Class II).

As with the Proposed Project, the electric fields associated with the new transmission lines under Alternative 3 may be of sufficient magnitude to impact operation of some pacemakers. Given the rarity of an exposure event to occur simultaneous with a biological need for full function pacemakers, it would be unlikely that the transmission line's electric field would cause a harmful interference to the operations of cardiac pacemakers; therefore, impacts under Alternative 3 would be the same as those identified for the Proposed Project, less than significant (Class III).

Compared to the Proposed Project, the alignment for Alternative 3 would be located in approximately eight additional miles of open area that contains rocky terrain, grass, bushes, and trees, including some areas that are densely wooded and some areas that may require blasting for the development of tower foundations. These areas would be susceptible to wildfires depending on the time of year. Therefore, construction blasting and wildfire impacts and operational wildfire impacts would be more adverse under Alternative 3 compared to those for the Proposed Project. However, with implementation of Mitigation Measure 4.7-8, impacts would be less than significant (Class II).

Alternative 6

Similar to the Proposed Project, construction activities associated with Alternative 6 would require mitigation to ensure that impacts associated with the routine use of hazardous materials, accidental release of hazardous materials, the release and mobilization of previously unidentified residual contamination, interference with an adopted emergency response plan, and electric shock hazards would be less than significant. Implementation of Mitigation Measures 4.7-1a through

4.7-1e, 4.7-2, 4.7-3a and 4.7-3b, 4.7-7 and 4.7-11 would reduce these impacts to less than significant (Class II). Under Alternative 6, these impacts would be the same as those under the Proposed Project.

Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 6. Therefore, no school related impacts would occur under Alternative 6 (No Impact). The Proposed Project would be more adverse compared to Alternative 6 with regard to hazards impacts to schools.

Alternative 6 would result in a shorter distance of new structures in existing agricultural areas where none exist currently compared to the Proposed Project. Therefore, the hazard to aerial sprayers under Alternative 6 would be slightly less severe than would occur under the Proposed Project. However, this impact would remain less than significant with implementation of Mitigation Measure 4.7-6 (Class II).

As with the Proposed Project, the electric fields associated with the new transmission lines under Alternative 3 may be of sufficient magnitude to impact operation of some pacemakers. Given the rarity of an exposure event to occur simultaneous with a biological need for full function pacemakers, it would be unlikely that the transmission line's electric field would cause a harmful interference to the operations of cardiac pacemakers; therefore, impacts under Alternative 3 would be the same as those identified for the Proposed Project, less than significant (Class III).

Compared to the Proposed Project, the alignment for Alternative 6 would be located in approximately four additional miles of open area that contains rocky terrain, grass, bushes, and trees that would be susceptible to wildfire depending on the time of year. Therefore, the construction and operation wildfire hazard would be more adverse under Alternative 6 compared to the Proposed Project. However, implementation of Mitigation Measure 4.7-8 would still reduce these impacts to a less than significant level (Class II).

Impact 4.7-ALT6-1: Alternative 6 could potentially impact airport operations at the Woodlake Airport. *Less than significant (Class III)*

The Woodlake Airport is located within approximately 1.5 miles of Alternative 6. The alternative would involve construction of towers that would be as tall as 160 feet. The proposed transmission line design would comply with Federal Aviation Administration (FAA) procedures as final tower locations, types, and heights would be submitted to the FAA for it to make a hazard determination. Additionally, a Notice of Proposed Construction or Alteration form (FAA Form 7460-1) would be filed with the FAA, as required. The FAA can require modifications to the alternative, such as installation of high-visibility devices. Because Alternative 6 would comply with FAA aviation safety rules and procedures, Alternative 6 would not result in significant aviation safety hazards; therefore, impacts would be less than significant.

Mitigation: None required.

References – Hazards and Hazardous Materials

- Baker, 2009. Personal communication with Mr. Bob Baker, Owner of Baker Ranch. April 15, 2009.
- California Agricultural Aircraft Association (CAAA), 2008. Personal communication with Ms. Terry Gage, Executive Director. December 2, 2008.
- California Department of Forestry and Fire Protection (CalFire), 2005. CalFire (formerly known as California Department of Forestry), Tulare Unit. Fire Management Plan 2005.
- California Department of Water Resources (DWR), 1991. *California Well Standards*. DWR Bulletin 74-90, June 1991.
- City of Farmersville, 2002. City of Farmersville General Plan. September, 2002.
- City of Visalia, 2008. *Emergency Preparedness* webpage. Accessed webpage (http://www.ci.visalia.ca.us/depts/fire_department/emergency_preparedness/default.asp) November 26, 2008.
- Electric Power Research Institute (EPRI), 1997. *Susceptibility of Implanted Pacemakers and Defibrillators to Interference by Power-Frequency Electric and Magnetic Fields*, August 1997.
- Environmental FirstSearch, 2008. Environmental FirstSearch Report Prepared for Southern California Edison, April 10, 2008. Proponent's Environmental Assessment, Appendix H.
- Federal Aviation Administration (FAA), 2008a. Electronic communication with Mr. Harlow Voorhees, Safety Team Manager. December 8, 2008.
- Federal Aviation Administration (FAA), 2008b. Personal communication (telephone and electronic mail) with Mr. Harlow Voorhees, Safety Team Manager. December 2, 2008.
- Fresno County, 2000. Fresno County General Plan Health and Safety Element. October 2000.
- Fresno County Environmental Health Division (FCEH), 2009. Certified Unified Program Agency (CUPA) website (<http://www.co.fresno.ca.us/DivisionPage.aspx?id=2974>), accessed April 10, 2009.
- Legislative Council of California (LCC), 2009. California Public Resources Code Section 4125. Obtained online (<http://www.leginfo.ca.gov/index.html>) January 9, 2009.
- Regional Water Quality Control Board (RWQCB), 2008. Personal communication with Russell Walls, Region 5 Site Clean-Up Unit. November 17, 2008.
- Sterling Energy Systems (SES), 2008. Application for Certification to the California Energy Commission for the Sterling Energy Systems Solar Two Project, Appendix I, Electric and Magnetic Field Calculations. Submitted June 30, 2008.
- Southern California Edison Company. 2008. *Proponent's Environmental Assessment San Joaquin Cross Valley Loop Project*. Filed May 30, 2008.

Tulare County, 2001. Tulare County General Plan Policy Summary.

Tulare County, 2008. *Emergency Preparedness* webpage. Accessed webpage
(http://www.tularehhsa.org/emerg_prep/index.cfm) November 26, 2008.

Tulare County Agricultural Commissioner (TCAC), 2009a. Personal communication with
Mr. Bill Deavours, Deputy Director of Pesticides Division. April 15, 2009.

TCAC, 2009b. Personal communication with Mr. Bill Appleby, Assistant Agricultural
Commissioner. April 15, 2009.

Tulare County Fire Department (TCFD), 2008. Personal communication with Linda, at the Tulare
County Fire Department headquarters in Farmersville. November 24, 2008.

Tulare County Health and Human Services Agency (TCHHSA), 2008. *CUPA – Certified Unified
Program Agency* webpage. Accessed webpage
(http://www.tularehhsa.org/enviro_health/Content_CUPA.cfm) November 18, 2008.

4.8 Hydrology and Water Quality

4.8.1 Setting

This section discusses the existing environmental and regulatory setting of the Proposed Project and alternatives, identifies potential impacts related to construction, operation and maintenance of the Proposed Project and alternatives, and proposes mitigation measures for those impacts determined to be significant. Setting information in this section was compiled from: the Proponent's Environmental Assessment (PEA) (SCE, 2008), peer-reviewed scientific literature, resource agency websites and databases, and Geographic Information System (GIS) data.

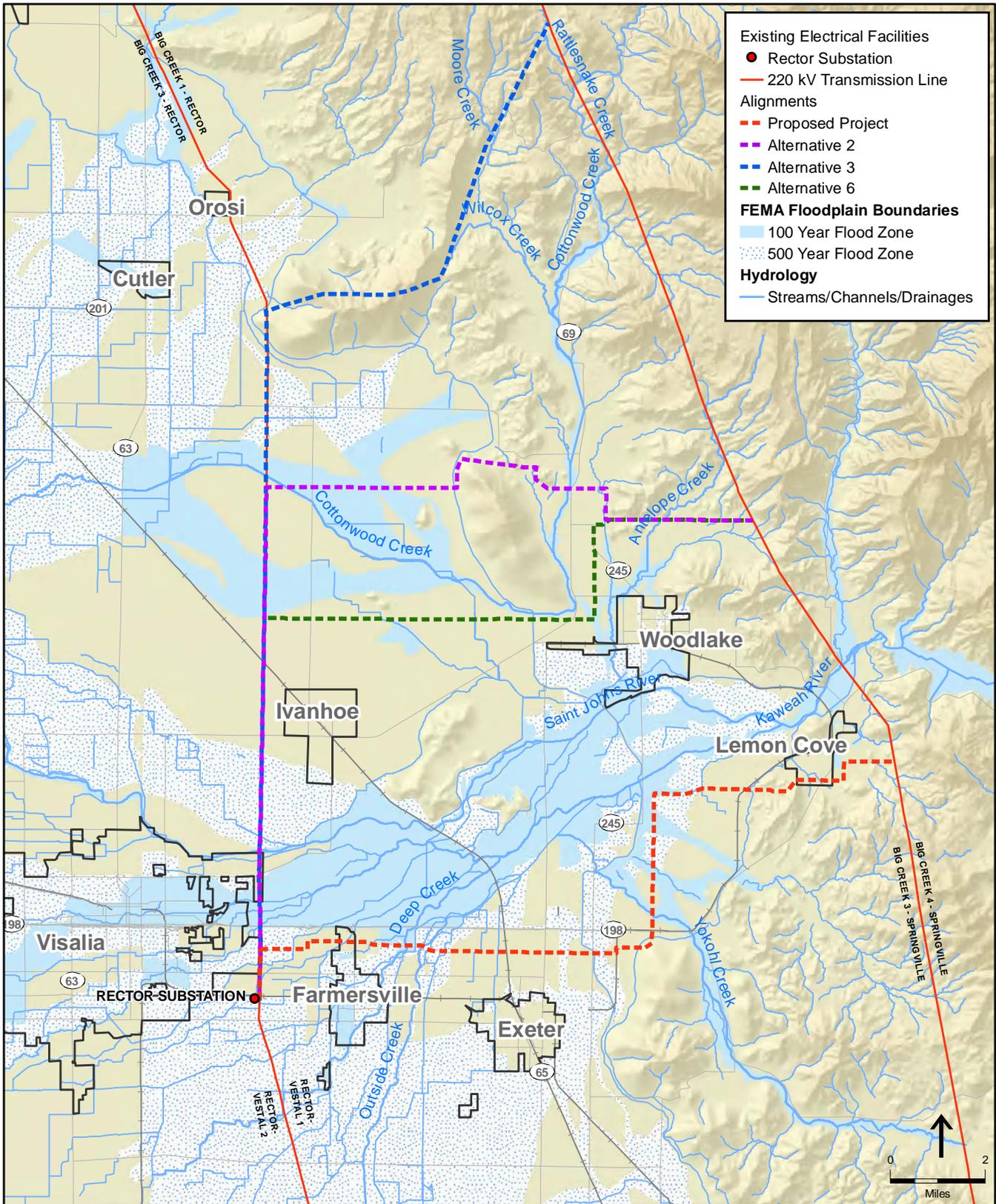
Environmental Setting

Regional Setting and Climate

The Proposed Project and alternatives are located in the southern portion of the San Joaquin Valley, within the Tulare Lake hydrologic unit (or basin). In general, the study area encompasses the foothills of the Sierra Nevada range to the north and east, and the California Central Valley to the south and west. Ground surface elevations within the study area range from approximately 12,000 feet above sea level (asl) at the eastern extent of the Kaweah River watershed to 340 feet asl at the southwestern extent near the City of Visalia. Tulare County, including the study area, has a Mediterranean climate characterized by hot, dry summers and mild winters. Most rainfall occurs during the winter between the months of November and March. Average annual precipitation in the study area ranges from 10 to 14 inches per year, increasing eastward (WRCC, 2008a, 2008b).

Surface Water Hydrology and Drainage

This portion of the San Joaquin Valley is internally drained (i.e., runoff eventually drains to the valley trough rather than to the ocean). Flow of surface water and runoff is generally from east to west. Upon reaching the valley floor, most channels emerging from the Sierra Nevada foothills form distributaries (i.e., the opposite of tributaries) as they bisect alluvial fan deposits and continue westward toward the valley trough, resulting in a greater number of channel branches. Channels in this area typically exhibit a bi-modal annual hydrograph (i.e., a runoff peak occurs in the late fall or early winter due to rainfall, and another peak occurs in the late spring or early summer as a result of snowmelt). Most channels and drainages in the study area are ephemeral due to the seasonal nature of rainfall, low annual rainfall totals, irrigation demands, and the relatively high permeability of the valley floor alluvial deposits. Normally, all native surface water supplies, imported water supplies, and direct precipitation percolate into valley groundwater if not lost through consumptive use, evapotranspiration, or evaporation (CVRWQCB, 2004). However, due to snowmelt runoff and their use as conveyance facilities for water purveyors and contractors, some channels experience perennial flow in some years. The tendency for channels to dry-up increases westward from the foothills. Major surface water channels in the study area include the Kings River, Cottonwood Creek, the Kaweah River, the Saint Johns River, Yokohl Creek, and the Tule River (Figure 4.8-1).



SOURCE: ESRI, 2008; SCE, 2008; FEMA, 1995; NHD, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.8-1
Local Hydrology

Kaweah River

Most of the study area falls within the Kaweah River watershed. The upper Kaweah River is impounded and controlled to some degree by the Terminus Dam, which was completed in 1962 by the U.S. Army Corps of Engineers, forming Lake Kaweah with an approximate capacity of 150,000 acre-feet. Lake Kaweah is located near the eastern margin of the study area, approximately 18 miles east of the City of Visalia. The upper Kaweah River drains about 561 square miles of the Sierra Nevada and has its headwaters near the 12,000 foot elevation line. West of the study area, the Kaweah River is eventually a tributary to the Tule River.

As is typical of most streams in this area, the Kaweah River experiences a peak flow in winter and in the late spring or early summer. The U.S. Geological Survey (USGS) collected flow information for the upper Kaweah River (just downstream of the Terminus Dam) from water year (WY)¹ 1962 through 1990. Over this time period, the largest recorded peak flow events were between 5,000 and 6,000 cubic feet per second (cfs), and most of the recorded peaks occurred in the late spring or summer as a result of snowmelt (or perhaps rain-on-snow events). Average annual flow over the monitored period ranged from 104 cfs during dry years to almost 2,000 cfs during wet years (USGS, 2008). Based upon the recorded stream flow data, the Kaweah River flows perennially in most years.

Kings River

A small portion of Alternative 3 intersects with the Kings River watershed and the Kings Groundwater Subbasin. The Kings River watershed encompasses 1,742 square miles, ranging in elevation from 500 to 14,000 feet asl. Variation in runoff is great, not only from year to year but from month to month. As a result of this variation, until Pine Flat Dam (forming Pine Flat Reservoir) was completed in 1954 by USACE there were alternating periods of flood in the Kings River watershed. Similar to the Kaweah River, the Kings River also experiences a peak flow in winter and in the late spring or early summer.

Artificial Channels and Ditches

The study area is also traversed by a number of artificial conveyance channels and irrigation canals. Importing irrigation water into this otherwise relatively arid region is necessary in order to produce the various crops grown in the study area. The Tulare Irrigation District Canal and the Friant-Kern Canal are the most notable irrigation canals within the study area. Built and maintained by the Tulare Irrigation District, the Tulare Irrigation Canal delivers water to various contractors in the western part of Tulare County. The Friant-Kern Canal is a federal project (i.e., Central Valley Project) that delivers water from the San Joaquin River to contractors in Tulare County and further south.

¹ A Water Year begins on October 1 of the previous year and ends on September 30 of the designated Water Year. For example, Water Year 2004 comprises October 1, 2003 through September 30, 2004.

Surface Water Quality

The quality of surface water in the study area is generally high; this includes water from stream groups feeding onto the valley floor as well as the water introduced into the Kaweah River watershed from the Friant-Kern Canal (Tulare County, 2007). Streams running through the study area are draining the western slopes of the Sierra Nevada; in this area, the dominance of granitic rocks and relatively undisturbed (i.e., undeveloped) and protected (i.e., Sequoia National Park) landscapes generally results in good quality surface water. However, in some areas the water quality effects of past land-use practices, such as mining and logging, persist.

The Central Valley Regional Water Quality Control Board (CVRWQCB) is responsible for the protection of water quality and beneficial uses of waters within Tulare County, including the study area. The CVRWQCB has yet to identify any impairments with the study area. However, just east of the study area, the CVRWQCB has identified a water quality issue for Lake Kaweah related to the presence of mercury, although the potential sources of the mercury have not been identified (CVRWQCB, 2006). The CVRWQCB (2006) has also indentified water quality issues for the lower Kings River related to electrical conductivity, molybdenum, and toxaphene; the source of these constituents is identified as agriculture. Regulatory frameworks, standards, and management actions concerning water quality in the study area are discussed in further detail below.

Flooding

Flooding within the study area (e.g., near the City of Visalia) is controlled to some degree by Terminus Dam on the Kaweah River (described above), yet flooding still occurs and the flood zones are several miles wide in some areas (Figure 4.8-1). The Federal Emergency Management Agency (FEMA) is responsible for mapping areas subject to flooding during a 100-year flood event (i.e., one percent chance of occurring in a given year). According to FEMA (1986), several flood zones intersect the study area and alignment; the principal flood zones are associated with the Kaweah River, the Saint Johns River, and Yokohl Creek.

Groundwater Hydrology

The San Joaquin Valley is a geologic depression formed between two uplifted areas: the Coast Range on the west and the Sierra Nevada to the east. The valley has been filled by almost four miles of sedimentary material, most of which contains water too saline for domestic use (Tulare County, 2007). Recent alluvial deposits characterizing the upper layer (to a depth of approximately 3,000 feet) of sedimentary material comprise an extensive underground reservoir of fresh water.

The study area overlies the northeast portion of Kaweah Groundwater Subbasin (Kaweah Subbasin), which is part of the larger San Joaquin Valley Groundwater Basin (DWR, 2004). The Kaweah Subbasin lies between the Kings Groundwater Subbasin on the north, the Tule Groundwater Subbasin on the south, crystalline bedrock of the Sierra Nevada foothills on the east, and the Kings River Conservation District on the west. The Kaweah Subbasin generally comprises lands in the Kaweah Delta Water Conservation District (KDWCD). Groundwater flow is generally southwestward, from areas of recharge along the eastern side of the San Joaquin

Valley westerly toward the valley trough. On the east side of the Kaweah Subbasin, the sedimentary deposits comprising the subbasin consist of material derived from the Sierra Nevada and are divided into three stratigraphic units: continental deposits, older alluvium and younger alluvium. For the most part, accessible groundwater occurs within an unconfined state throughout the study area (usually coincident with the extent of modern alluvial fan deposits), while localized areas of semi-confined groundwater occur sporadically.

On average, the Kaweah Subbasin water level has declined by about 12 feet from 1970 through 2000 (DWR, 2004). The KDWCD estimated that the groundwater reservoir within and near KDWCD's boundaries is over-drafted by approximately 17,000 to 36,000 acre-feet per year (Tulare County, 2007). Groundwater level information for the City of Visalia shows an ever decreasing static groundwater level since 1986 (Tulare County, 2007). Groundwater flow in northwestern Tulare County tends to flow away from the Kaweah River, and ranges in depth from 30 to 80 feet below ground surface (bgs) (SCE, 2008).

Groundwater Quality

The groundwater in the Kaweah Subbasin is generally of a calcium bicarbonate type, with sodium bicarbonate waters occurring near the western margin. The mineral quality of groundwater extracted for use in Tulare County is generally satisfactory for crop irrigation. Total dissolved solids (TDS) values range from 35 to 1,000 milligrams per liter (mg/L), with a typical range of 300 to 600 mg/L (DWR, 2004). The salinity of groundwater typically increases in a westward direction across the San Joaquin Valley. There are localized areas of high nitrate pollution on the eastern side of the subbasin; there is also high salinity between the cities of Lindsay and Exeter.

Under natural conditions, groundwater moves from recharge areas along the sides of the Valley toward the low (or central) section where it is discharged at the land surface by seepage, evaporation, and transpiration. The great alkali areas of the southwestern parts of the County indicate natural discharge of groundwater by evaporation has occurred, leaving an accumulation of salts in the surface soils (Tulare County, 2007). Because of the closed nature of the Tulare Lake Basin, there is little net loss of groundwater through subsurface outflow. As such, salts accumulate within the basin due to importation and subsequent evaporation of surface water. The principle water quality problem in the basin is the accumulation of salts; this problem is compounded by the overdraft of groundwater for municipal, agricultural, and industrial purposes, and the use of water from deeper formations and outside the basin which further concentrates salts within the remaining groundwater (CVRWQCB, 2004).

Regulatory Setting

Federal and State Water Quality Policies

The statutes that govern the activities under the Program that affect water quality are the federal Clean Water Act (CWA) (33 U.S.C. § 1251) and the Porter-Cologne Water Quality Control Act (Porter-Cologne) (Water Code, § 13000 et seq.). These acts provide the basis for water quality regulation in the study area.

The California Legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality to the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for the implementation of State and federal regulations. The nine RWQCBs throughout California adopt and implement water quality control plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The RWQCB adopts and implements a Water Quality Control Plan (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code, §13240-13247).

Beneficial Use and Water Quality Objectives (CWA Section 303)

The CVRWQCB is responsible for the protection of the beneficial uses of waters within Tulare County and the study area. The CVRWQCB uses its planning, permitting, and enforcement authority to meet this responsibility and has adopted the Water Quality Control Plan for the Tulare Lake (Basin Plan) to implement plans, policies, and provisions for water quality management. The CVRWQCB published the most recent version of the Basin Plan in January 2004 (CVRWQCB, 2004).

In accordance with State policy for water quality control, the CVRWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction (CVRWQCB, 2004). Table 4.8-1 identifies beneficial uses designated in the Basin Plan for the surface water bodies relevant to the study area. Table 4.8-2 defines the applicable beneficial use categories. For groundwater, the following beneficial uses have been identified and occur throughout the Tulare Lake Basin (including the study area): municipal and domestic supply, agricultural supply, industrial service supply, industrial process supply, water contact recreation, and wildlife habitat. The Basin Plan also includes water quality objectives that are protective of the identified beneficial uses; the beneficial uses and water quality objectives collectively make-up the water quality standards for a given region and Basin Plan (CVRWQCB, 2004). Within the study area, agricultural supply is an important and prevalent beneficial use of surface water and groundwater. The CVRWQCB is charged with protecting the quality of surface water and groundwater that may be diverted or extracted (or otherwise captured) and used for agricultural supply. However, the CVRWQCB does not exercise authority over the maintenance or condition of water delivery infrastructure (e.g., pipelines, canals, ditches, etc.). Therefore, any issues concerning the potential damage to water delivery infrastructure as a result of the Proposed Project or alternatives would be resolved between SCE and the appropriate landowner or entity during acquisition of project right-of-way (ROW).

**TABLE 4.8-1
BENEFICIAL USES OF WATERS WITHIN THE STUDY AREA**

Waterbody	MUN ^a	AGR	IND	PRO	GWR	FRSH	NAV	POW	REC 1	REC 2	COMM	WARM	COLD	WILD	RARE	MIGR	SPWN	AQUA
Kaweah River (below Lake Kaweah)	X	X	X	X	X				X	X		X		X				
Kings River (Friant-Kern to Peoples Weir)	X	X		X	X				X	X		X		X				

^a Refer to Table 4.8-2, below, for definition of abbreviations

SOURCE: CVRWQCB, 2004.

**TABLE 4.8-2
DEFINITIONS OF BENEFICIAL USES OF SURFACE WATERS**

Beneficial Use	Description
Municipal and Domestic Supply (MUN)	Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
Agricultural Supply (AGR)	Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
Industrial Service Supply (IND)	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.
Industrial Process Supply (PRO)	Uses of water for industrial activities that depend primarily on water quality.
Groundwater Recharge (GWR)	Uses of water for natural or artificial recharge or groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
Freshwater Replenishment (FRSH)	Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).
Navigation (NAV)	Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.
Hydropower Generation (POW)	Uses of water for hydropower generation.
Water Contact Recreation (REC 1)	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white-water activities, fishing, or use of natural hot springs.
Non-Contact Water Recreation (REC 2)	Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
Commercial and Sport Fishing (COMM)	Uses of water for commercial, recreational (sport) collection of fish, shellfish, or other aquatic organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

**TABLE 4.8-2 (Continued)
DEFINITIONS OF BENEFICIAL USES OF SURFACE WATERS**

Beneficial Use	Description
Warm Freshwater Habitat (WARM)	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Cold Freshwater Habitat (COLD)	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Wildlife Habitat (WILD)	Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
Rare, Threatened, or Endangered Species (RARE)	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal laws as rare, threatened, or endangered.
Migration of Aquatic Organisms (MIGR)	Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.
Spawning, Reproduction, and/or Early Development (SPWN)	Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
Aquaculture (AQUA)	Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

SOURCE: CVRWQCB, 2004.

The objective of the federal CWA is “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Under CWA section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. Table 4.8-3 provides details of the listing of Kaweah Lake and the lower Kings River as impaired water bodies, as designated by the CVRWQCB (2006), including pollutants and issues of concern. For those water bodies failing to meet standards, states are required to establish total maximum daily loads (TMDL). A TMDL defines how much of a specific pollutant a given water body can tolerate and still meet relevant water quality standards. To date, a TMDL has not been developed for Kaweah Lake or for the lower Kings River.

**TABLE 4.8-3
PROPOSED 2006 CWA SECTION 303(D) LIST OF
WATER QUALITY LIMITED SEGMENTS IN THE STUDY AREA**

Name	Pollutant/Stressor	Source	Proposed TMDL Completion Date
Kaweah Lake	Mercury	unknown	2019
Kings River (Island Weir to Stinson and Empire Weirs)	Electrical Conductivity Molybdenum Toxaphene	Agriculture	2015

SOURCE: CVRWQCB, 2006.

Water Quality Certification (CWA Section 401)

Section 404 of the CWA requires a permit from the United States Army Corps of Engineers (Corps) prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA section 404. The term “waters of the United States” as defined in the Code of Federal Regulations (40 CFR 230.3[s]) includes all navigable waters and their tributaries. In addition, section 401 of the CWA requires that an applicant for any federal permit (e.g., a Corps 404 permit) obtain certification from the state that the discharge will comply with other provisions of the CWA and with state water quality standards. For the study area, the CVRWQCB or SWRCB (in the case of activities associated with water diversions) must provide the water quality certification required under section 401 of the CWA. SCE would contact the relevant federal agency(s) in order to determine whether the federal agency(s) would take jurisdiction on a specific project and require a permit; if a federal permit is required then SCE would also be required to obtain water quality certification from the CVRWQCB.

NPDES Program (CWA Section 402)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish storm water permit application requirements for discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance. Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address storm water discharges from construction sites that disturb land equal to or greater than one acre and less than five acres (small construction activity).

General Construction Permit (Order 99-08-DWQ)

While federal regulations allow two permitting options for storm water discharges (individual permits and General Permits), the SWRCB has chosen to adopt only one statewide General Permit at this time that would apply to all storm water discharges associated with construction activity.² This General Permit requires all dischargers where construction activity disturbs one acre or more, to:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that would prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters.
- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the nation.
- Perform inspections of all BMPs.

² SWRCB Order No. 99-08-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000002.

This General Permit is implemented and enforced by the nine RWQCBs. The CVRWQCB administers the stormwater permitting program in the section of Tulare County that includes the study area. Dischargers are required to submit a Notice of Intent (NOI) to obtain coverage under this General Permit and annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. Dischargers are responsible for notifying the relevant RWQCB of violations or incidents of non-compliance.

On August 19, 1999, the SWRCB reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ, referred to as “General Permit”). In September 2000, a court decision directed the SWRCB to modify the provisions of the General Permit to require permittees to implement specific sampling and analytical procedures to determine whether BMPs implemented on a construction site are: (1) preventing further impairment by sediment in storm waters discharged directly into waters listed as impaired for sediment or silt, and (2) preventing other pollutants, that are known or should be known by permittees to occur on construction sites and that are not visually detectable in storm water discharges, from causing or contributing to exceedances of water quality objectives. The monitoring provisions in the General Permit have been modified pursuant to the court order.

If the project is approved, SCE will submit an NOI to the SWRCB and obtain coverage under the General Permit. The preparation of a SWPPP would be required in accordance with the General Permit. The SWPPP would include, but not be limited to, relevant measures, conditions, and obligations which would reduce the impacts of construction activities on stormwater and receiving water quality and quantity.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (codified in the California Water Code, §13000 *et seq.*) is the basic water quality control law for California. As mentioned above, it is implemented by the SWRCB and the nine RWQCBs. The SWRCB establishes statewide policy for water quality control and provides oversight of the RWQCBs’ operations. The RWQCBs have jurisdiction over specific geographic areas that are defined by watersheds. Tulare County is under the jurisdiction of the CVRWQCB. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state³ could cause pollution or nuisance, including impacts to public health and the environment.

Dredge/Fill Activities and Waste Discharge Requirements

Actions that involve or are expected to involve dredge or fill, and discharge of waste, are subject to water quality certification under section 401 of the CWA and/or waste discharge requirements under the Porter-Cologne Act. The SWRCB’s Division of Water Rights processes section 401 water quality certifications on projects that involve water diversions (California Code of Regulations, title 23, § 3855). Chapter 4, Article 4 of the Porter-Cologne Act (California Water

³ “Waters of the state” are defined in the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” (Water Code, § 13050 (e))

Code, § 13260-13274), states that persons discharging or proposing to discharge waste that could affect the quality of waters of the state (other than into a community sewer system) shall file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States) an NPDES permit is required, which is issued under both State and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under State law. The WDR application process is generally the same as for CWA section 401 water quality certification, though in this case it does not matter whether the particular project is subject to federal regulation. SCE would contact the CVRWQCB and file a Report of Waste Discharge; the CVRWQCB would then determine whether an issuance or a waiver of WDR is required.

Waiver for Dewatering and Discharge to Land (CVRWQCB Resolution R5-2003-0008)

The CVRWQCB has adopted a waiver of WDR (Resolution R5-2003-0008) for specific types of low-threat discharges to the land surface with the Central Valley region. Construction dewatering is among the activities covered by this waiver. Waivers serve much the same purpose as general permits (i.e., they are intended to describe a range of protective measures that could be applied to a broad category of activities). SCE would apply for and obtain this waiver from the CVRWQCB for their actions involving dewatering.

Floodway Encroachment (Central Valley Flood Protection Board)

The California Department of Water Resources (DWR), Central Valley Flood Protection Board (CVFPB; formerly the Reclamation Board), regulates the design and construction of encroachments which may affect flood control works and floodways along the Sacramento and San Joaquin Rivers and their tributaries. The CVFPB has jurisdiction over any project that proposes to work in a regulated stream, designated floodway, on federal flood control project levee slopes, or within 10 feet of the levee toe; this includes projects related to the installation of pipelines, conduits, and utility lines. Approval by the CVFPB is required for projects or uses which encroach into rivers, waterways, and floodways within and adjacent to federal and State authorized flood control projects and within designated floodways adopted by the CVFPB. Sections of Alternatives 2, 3 and 6 fall within the designated floodways of the Saint Johns River and/or Cottonwood Creek, and SCE would be required to consult with and obtain (if necessary) an encroachment permit (or waiver) from the CVFPB.

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following policies identified in the General Plan Conservation and Open Space Element may be applicable to the Proposed Project and alternatives:

Policy 6.C.2: Surface waters, which serve as substantial recharge sources for groundwater basins, should be maintained at levels of purity suitable for agricultural and domestic use, except that certain particulate materials may be tolerated because of natural filtration available.

Policy 6.C.3: Solid waste disposal areas should not be located where there is possibility of ground or surface water contamination. (At least four feet above the water table where there is a surface mantle of finely grained natural soil, well compacted, and at least ten feet above the water table where there is disposal of toxic wastes.)

Policy 6.C.10: Development practices that upset natural habitat in wetlands and watersheds should be controlled so as to minimize erosion and maximize beneficial vegetative growth.

Policy 6.C.24: During preliminary and final road location surveys, roads should be planned away from natural drainage channels. Stream crossing points should involve a minimum disturbance to banks and existing channels and excessive cuts and accumulations of waste soil near natural drainages avoided.

Policy 6.J.5: Building and road construction on slopes of more than 25 percent should be prohibited, and development proposals on slopes of 5-25 percent should be required to be accompanied by plans for control of prevention of erosion, alteration of surface water runoff, and increase of soil slippage and wildfire occurrence.

Policy 6.J.7: Channel modification should be discouraged in streams and rivers where they increase the rate of flow, rate of sediment transport, erosive capacity, have adverse effect on aquatic life or modify necessary groundwater recharge.

(Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following policies identified in the General Plan Open Space and Conservation Element may be applicable to the Proposed Project and alternatives:

Policy OS-A.25: The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season unless adequately mitigated to avoid sedimentation of creeks and damage to riparian habitat.

Policy OS-A.26: The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff.

(County of Fresno, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following policies identified in the General Plan Conservation, Open Space, Recreation and Parks Element may be applicable to the Proposed Project and alternatives:

Policy 1.2.1: Protect, and where necessary, restore and enhance a continuous corridor of native riparian vegetation along planning area waterways.

(City of Visalia, 2003).

City of Farmersville General Plan (Proposed Project)

The Conservation, Open Space, Parks and Recreation Element of the Farmersville General Plan includes one general goal relating to hydrology, water resources, and water quality that is applicable to the Proposed Project; the goal states following: “protect air and water quality from negative impacts” (City of Farmersville, 2002).

4.8.2 Significance Criteria

Significance criteria, or thresholds, listed in Appendix G of the CEQA Guidelines are used to determine the significance of potential impacts due to the Proposed Project and alternatives. Based on criteria in Appendix G of the CEQA Guidelines, a project would be considered to have a significant hydrology- or water quality-related effect on the environment if it would:

- a) Violate any water quality standards or waste discharge requirements;
- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- c) Substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site;
- d) Substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- f) Otherwise substantially degrade water quality;
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- j) Be susceptible to inundation by seiche, tsunami, or mudflow.

Some of the criteria listed in Appendix G of the CEQA Guidelines are not directly applicable to the Proposed Project and alternatives, or otherwise do not merit further discussion. For example, the study area is not subject to inundation by seiche or tsunami, or mudflow. Further, all potential impacts of the Proposed Project and alternatives upon water quality are addressed within the context of criterion a). Criterion a) includes all applicable local, State, and federal water quality

standards or waste discharge requirements. Further, the CVRWQCB water quality standards and objectives are protective of a wide range of beneficial uses within all areas of the Proposed Project and alternatives (CVRWQCB, 2004). Resultantly, potential water quality impacts outside of those addressed by criterion a) are not applicable to the Proposed Project and alternatives and, consequently, impacts related to otherwise degrading water quality (criterion f)) are not addressed further in this EIR.

In addition, the Proposed Project and alternatives would not have an impact upon flooding, and the various criteria (d), e), g), and i)) related to flooding or stormwater drainage systems, are subsequently not applicable in this case. Neither the Proposed Project nor the alternatives would place housing within a 100-year flood hazard area, nor would they expose people or structures to a significant risk of loss, injury, or death involving flooding (e.g., any existing risk concerning flooding would not be exacerbated by the Proposed Project or the alternatives). The Proposed Project and alternatives would not increase the rate or amount of surface runoff such that it would result in substantial flooding. Regarding criterion e), there is no potential for the Proposed Project and alternatives to impact stormwater drainage systems or provide additional sources of polluted runoff not addressed in the context of the other criteria. All potential impacts concerning runoff and erosion resulting from implementation of the Proposed Project or alternatives are addressed under criteria a) and c).

The groundwater basins underlying the study area are relatively large, predominantly unconfined, and heavily impacted by existing agricultural demands (e.g., the annual overdraft within the Tulare Lake groundwater basin alone represents over half of the statewide total annual overdraft [Tulare County, 2007]). Groundwater use is not proposed for the Proposed Project or alternatives, and they would otherwise have negligible impact upon existing groundwater supplies and processes (criterion b)).

4.8.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on hydrology and water quality.

4.8.4 Impacts and Mitigation Measures

Approach to Analysis

This impact analysis considers the potential hydrologic and water quality effects of activities associated with the construction operation, and maintenance of Proposed Project. The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades, and the associated construction, operation and maintenance activities would have no impact with respect to hydrology and water quality. Similarly, the same type of electrical system and safety upgrade activities proposed for the Rector Substation would not have any potential hydrology and water quality impacts.

a) Violate any water quality standards or waste discharge requirements.

Impact 4.8-1: Construction and maintenance of the Proposed Project could result in increased erosion and sedimentation and/or pollutant (e.g., fuels and lubricants) loading to surface waterways, which could increase turbidity, suspended solids, settleable solids, or otherwise decrease water quality in surface waterways. *Less than significant with mitigation* (Class II)

Construction activities associated with the Proposed Project could increase the turbidity or otherwise degrade the water quality of receiving stream channels or other surface waterways. Activities that disturb the ground near or within a stream channel (e.g., clearing and grading) could make soils and sediments more susceptible to erosion by altering their existing structure or state. Depending on the distance and ground slope, some portion of the eroded material could eventually be delivered to a receiving stream channel or other type of waterway over a relatively short time period (e.g., during the next rain event). In this case, increased erosion rates would likely lead to increased sediment concentrations and turbidity levels in the receiving stream channel and have a potentially adverse impact on the beneficial uses identified by the CVRWQCB (2004). Further, moderate increases in surface runoff from construction areas could initiate or exacerbate an erosion and sediment delivery problem. An increase in the runoff rate from a construction area may result from temporarily decreasing ground surface resistance to overland flow (e.g., clearing of native vegetation or slope grading), decreasing the infiltration capacity of the soil by means of compaction (e.g., with heavy equipment), or by increasing the velocity of runoff (e.g., concentrating flow into manmade features or into existing rills or gullies). In addition, if construction equipment or workers inadvertently release pollutants (e.g., hydraulic fluid or petroleum) on site, these compounds could be entrained by runoff and discharged into receiving channel(s) causing water quality degradation. The extent of erosion or pollution that could occur at any given construction site varies depending on soil type, vegetation/cover, and weather conditions.

Most elements of the Proposed Project that would require construction involve only short-term (i.e., within a single season) construction activities, and thus the associated potential impacts would be short-lived in nature. Actions associated with the Proposed Project that include notable construction components include removal and installation of lattice towers, installation of new poles, preparation of wire stringing sites, installation of access roads, and development of material staging yards. Specific construction activities referenced under this potential impact include, but are not limited to, clearing and grading, excavation work, and the stockpiling of soil or sediments. The Proposed Project would disturb a total of approximately 161.3 acres, of which approximately 89.9 acres would be restored upon completion of construction activities. The area of disturbance would not be concentrated in one or two locations, but rather spread throughout the entire Proposed Project area at discrete locations along the alignment; this would reduce the magnitude of the overall potential impact with respect to erosion and sediment delivery and also make it easier to control or prevent these potential problems.

As described above, the Proposed Project would be required to adhere to a number of federal and State water quality provisions. SCE would be required to submit an NOI to the SWRCB in order

to obtain approval to carry-out construction activities under the General Permit or a waiver thereof (all construction activities proposed as part of the Project are those typically covered or waived under the General Permit). The preparation of a SWPPP would be required in accordance with the General Permit. The SWPPP would include, but not be limited to, relevant measures, conditions, and monitoring obligations which would reduce the impacts of construction activities on water quality. Additionally, actions that involve or are expected to involve dredge or fill material, and/or discharge of waste, are subject to water quality certification under section 401 of the CWA and/or waste discharge requirements under the Porter-Cologne Act. If a federal permit is required as part of the project, then water quality certification for the actions covered within the federal permit would be obtained from the CVRWQCB. Otherwise, Chapter 4, Article 4 of the Porter-Cologne Act (California Water Code, § 13260-13274), states that persons discharging or proposing to discharge waste that could affect the quality of waters of the state (other than into a community sewer system) shall file a Report of Waste Discharge with the applicable RWQCB and be subject to Waste Discharge Requirements (WDR). WDR typically address potential indirect discharges of waste to surface waters, such as waste discharges to land (e.g., spoils disposal and storage) or erosion from soil disturbance. The WDR application process is generally the same as for CWA section 401 water quality certification, though in this case it does not matter whether the particular project is subject to federal regulation. As discussed above, if a federal permit is required then SCE would be required to also obtain water quality certification from the CVRWQCB. In addition, SCE would contact the CVRWQCB and file a Report of Waste Discharge; the CVRWQCB would then determine whether an issuance or a waiver of WDR is required.

Construction and maintenance activities associated with the Proposed Project could also increase the turbidity within receiving stream channels or other surface waterways. A total of eight miles of new access roads would be installed, some very near to existing surface water channels such as Deep Creek, Outside Creek, and Yokohl Creek. In general, roads commonly lead to increases in the volume of surface runoff as well as increases in erosion and sediment delivery. This is attributable to the fact that road installation substantially reduces the infiltration capacity of soils and disturbs the existing soil structure, making the soil more susceptible to erosion and entrainment by runoff. The beneficial uses of the surface water channels within the Proposed Project area are protected by the water quality standards outlined in the Basin Plan (CVRWQCB, 2004); these beneficial uses could be adversely affected by increased sedimentation and turbidity levels resulting from the erosion and delivery of sediment from the proposed new access roads.

Potential construction and maintenance surface water quality impacts are somewhat different with respect to the existing requirements for water quality protection. The existing measures required of SCE (e.g., the General Permit, water quality certification, and/or WDR) are sufficient to reduce potential construction-related water quality impacts to a less than significant level. Though, with respect to potential impacts associated with the proposed new access roads, the required measures are not necessarily sufficient. Therefore, Mitigation Measure 4.8-1 would be required to specifically address the potential water quality impacts associated with proposed new roads.

Mitigation Measure 4.8-1: For all segments of new access roads that would be within 300 feet of an existing surface water channel (including irrigation ditches where no berm or levee is currently in place) and traverse a ground slope greater than two percent, the following protective measures shall be installed:

- Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side;
- Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet).

Significance after Mitigation: Less than Significant.

Impact 4.8-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways. *Less than significant with mitigation (Class II)*

As discussed above, groundwater within the Proposed Project area could be as shallow as 30 feet. Therefore, the proposed excavations (up to 60 feet) could encounter groundwater in select locations, in which case dewatering would be necessary. Where the groundwater table is relatively shallow, some groundwater seepage may occur into pole excavation or auger holes requiring dewatering on a one-time basis immediately prior to pole placement and installation. All dewatering activities, when necessary, would discharge directly to the land surface in the vicinity of the particular installation or construction site. Any discharge to the land surface has the potential, depending on the volume and rate, to induce erosion and cause sediment to be delivered to nearby surface waterways. However, such discharges would be very limited in duration, only occur on a one-time basis, and would be distinct from stormwater discharges. The existing measures required of SCE as part of the waiver of WDR (CVRWQCB Resolution R5-2003-0008) would be sufficient to reduce the potential sediment loading impacts of dewatering activities to a less than significant level.

Though the dewatering process would be temporary, yielding only a small volume of groundwater, the potential exists for such water or saturated soils to already be contaminated. Discharge (i.e., through dewatering) or displacement of contaminated water or soil, as a result of excavation related to the Proposed Project, could potentially impact the beneficial uses of surface water or groundwater identified in the Basin Plan (CVRWQCB, 2004). Mitigation Measure 4.8-2 would be required to specifically address the potential water quality impacts associated with dewatering discharge of previously contaminated groundwater.

Mitigation Measure 4.8-2: If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), SCE and/or its contractor shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with State hazardous waste disposal requirements.

Significance after Mitigation: Less than Significant.

c) *Substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site.*

Impact 4.8-3: Construction activities could impact local drainage patterns, or the course of a given stream, resulting in substantial on- or off-site erosion or sedimentation. *Less than significant with mitigation (Class II)*

The Proposed Project, in disturbing the ground and hillsides during construction activities, may alter existing drainage pathways so as to make surface soils more susceptible to erosive forces (i.e., overland flow) and/or generate enough increased runoff through removal/clearing of existing vegetation to increase surface erosion. This potential impact is synonymous with the potential impact of construction activities upon erosion processes, sediment delivery, and water quality, and it is addressed in Impact 4.8-1 (above).

Mitigation Measure 4.8-3: Implement Mitigation Measure 4.8-1, described above.

Significance after Mitigation: Less than Significant.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows.*

Impact 4.8-4: Certain structures would be installed within a flood hazard area and could impede or redirect flood flows. *Less than significant (Class III)*

As part of the Proposed Project, new structures (i.e., poles) would be placed within a 100-year floodplain as identified by FEMA (1986). The 100-year floodplains relevant to the Proposed Project are those primarily related to the Kaweah River and Yokohl Creek. The new structures placed within the 100-year floodplains would not be large enough to impede or redirect flood flows. In the vicinity of the Proposed Project (i.e., the flat valley area), overbank flows spread-out rapidly and cover a relatively large area, and the effect that the new structures would have on the hydraulics of such flows is essentially negligible.

Mitigation: None required.

4.8.5 Cumulative Impacts

The geographic context for the cumulative impacts associated with hydrology and water quality is the Kaweah River watershed downstream (or west) of Terminus Dam.

The Proposed Project, along with the past, present, and reasonably foreseeable future projects in the area identified in Section 3.6, *Cumulative Projects*, would be required to comply with applicable federal, State, and local water quality regulations. This project, along with other projects involving similar general construction activities, would be required to obtain coverage under the General Permit, Section 401 (of the CWA) water quality certification, and/or WDR. Storm water management measures would be required to be identified and implemented that would effectively control erosion and sedimentation and other construction related pollutants during construction. Other management measures, such as construction of infiltration/detention basins, would be required to be identified and implemented that would effectively treat pollutants that would be expected for the post-construction land use for certain projects. Construction and operational related stormwater runoff from this project would be controlled by the requirements of an NPDES permit (e.g., General Permit), WDR measures, and mitigation measures required as part of this EIR. Other new development in the area would also be required to control construction and operational stormwater by implementing State and local requirements regarding hydrology and water quality, as well as by requirements introduced through CEQA review where applicable. Furthermore, the mitigation measures described above would ensure that the Proposed Project contribution to hydrologic resources and water quality impacts would be less than cumulatively considerable. Therefore, the impact of the Proposed Project, in combination with other past, present, and reasonably foreseeable projects, would be less than significant (Class III).

4.8.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented. Therefore, there would be no impacts related to hydrology and water quality (No Impact).

Alternative 2

In general, the potential impacts to hydrology and water quality resulting from the implementation of Alternative 2 would be the same as for the Proposed Project. However, some differences in the extent of the potential impacts should be noted.

As discussed above, with respect to the sections of Alternative 2 that fall within the designated floodways of the Saint Johns River and Cottonwood Creek, SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.

Further, compared to the Proposed Project, more new access roads would be installed under Alternative 2. A total of 11.4 miles (compared to eight miles) of new access roads would be installed, some very near to existing surface water channels such as Antelope Creek and tributaries to Antelope Creek. Also, under Alternative 2, roads would generally be installed on steeper slopes as compared with the Proposed Project. Some roads would be installed on slopes exceeding 25 percent (though the proposed “switch-back” design would decrease the actual road slope) and this may require further consultation with Tulare County staff in order to ensure that Alternative 2 is consistent with the policies presented in the General Plan (Tulare County, 2001) (e.g., Policy 6.J.5 states that building and road construction on slopes of more than 25 percent should be prohibited).

Though the extent and severity of the potential construction and maintenance impacts related to the implementation of Alternative 2 may be slightly greater, they would not warrant additional or different mitigation measures than those required for the Proposed Project. Therefore, Mitigation Measures 4.8-1, 4.8-2, and 4.8-3 would also be required for Alternative 2 and the potential impacts of this alternative to hydrologic resources and water quality would be less than significant (Class II).

Alternative 3

In general, the potential impacts to hydrology and water quality resulting from the implementation of Alternative 3 would be the same as for the Proposed Project. However, some differences in the extent of the potential impacts should be noted.

As discussed above, with respect to the sections of Alternative 3 that fall within the designated floodways of the Saint Johns River and Cottonwood Creek, SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.

Further, compared to the Proposed Project, more new access roads would be installed as part of Alternative 3. A total of 18.5 miles (compared to eight miles) of new access roads would be installed, some very near to existing surface water channels such as Moore Creek, Wilcox Creek, and Rattlesnake Creek (all tributaries to Cottonwood Creek). Also, under Alternative 3, roads would generally be installed on steeper slopes as compared with the Proposed Project. Some roads would be installed on slopes exceeding 25 percent (though the proposed “switch-back” design would decrease the actual road slope) and this may require further consultation with Tulare County staff in order to ensure that Alternative 3 is consistent with the policies presented in the General Plan (Tulare County, 2001) (e.g., Policy 6.J.5 states that building and road construction on slopes of more than 25 percent should be prohibited).

Though the extent and severity of the potential construction and maintenance impacts related to the implementation of Alternative 3 may be slightly greater, they would not warrant additional or different mitigation measures than those required for the Proposed Project. Therefore, Mitigation

Measures 4.8-1, 4.8-2, and 4.8-3 would also be required for Alternative 3 and the potential impacts of this alternative to hydrologic resources and water quality would be less than significant (Class II).

Alternative 6

In general, the potential impacts to hydrology and water quality resulting from the implementation of Alternative 6 would be the same as for the Proposed Project. However, some differences in the extent of the potential impacts should be noted.

As discussed above, with respect to the sections of Alternative 6 that fall within the designated floodways of the Saint Johns River or Cottonwood Creek, SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.

Many of the new access roads that would be installed for Alternative 6 would be the same as those proposed for Alternative 2 (i.e., for the first 8.1 miles north of the Rector Substation, and for the last 3.2 miles at the eastern end of the alignment); the principal difference being the central part of Alternative 6 alignment (i.e., the approximately 9.2 miles that would not fall within the same alignment as Alternative 2), where SCE access would be achieved primarily through modification of existing roads (e.g., widening existing roads by roughly eight feet). The exact area or linear distance of new access roads that would be required for Alternative 6 has not yet been quantified, though it would likely be less than that proposed for Alternative 2 as Alternative 6 endeavors to make considerable use of existing roads. However, as with Alternative 2, some new access roads would be installed very near to existing surface water channels such as Antelope Creek and tributaries to Antelope Creek. Also, under Alternative 6, roads would generally be installed on steeper slopes as compared with the Proposed Project (e.g., at locations on the eastern portion, where the alignment is synonymous with Alternative 2).

Though the extent and severity of the potential construction and maintenance impacts related to the implementation of Alternative 6 may be slightly greater, they would not warrant additional or different mitigation measures than those required for the Proposed Project. Therefore, Mitigation Measures 4.8-1, 4.8-2, and 4.8-3 would also be required for Alternative 6 and the potential impacts of this alternative to hydrologic resources and water quality would be less than significant (Class II).

References – Hydrology and Water Quality

California Department of Water Resources (DWR), 2004. California's Groundwater, San Joaquin Valley Groundwater Basin, Kaweah Subbasin. California Department of Water Resources, Bulletin 118. Last updated February, 2004.

Central Valley Regional Water Quality Control Board (CVRWQCB), 2004. Water Quality Control Plan for the Tulare Lake Basin, Second Edition. Revised January 2004, http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml, accessed December 2008.

CVRWQCB, 2006. Proposed 2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments. Approved by the State Water Resources Control Board on October 25, 2006.

City of Farmersville, 2002. *Farmersville General Plan*. Adopted November 2002.

City of Visalia, 2003. *Conservation, Open Space, Recreation, and Parks Element to the Visalia General Plan*. June 1989, revised February 2003.

County of Fresno, 2000. *Fresno County General Plan, Open Space and Conservation Element*. October, 2000.

Federal Emergency Management Agency (FEMA), 1986. Flood Insurance Rate Map, Tulare County, California (Unincorporated Areas), Community-Panel Numbers: 065066 0300B, 065066 0470 B, 065066 0475B, 065066 0480B, and 065066 0490B. <http://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10001&storeId=10001&categoryId=12001&langId=-1&userType=G&type=1&dfirmCatId=12009>, accessed December 2008.

Southern California Edison Company. 2008. *Proponent's Environmental Assessment San Joaquin Cross Valley Loop Project*. Filed May 30, 2008.

Tulare County, 2001. *General Plan Policy Summary, Section 6 – Environmental Resources Management Element*. December 2001.

Tulare County, 2007. General Plan Background Report. December 2007.

U.S. Geological Survey (USGS), 2008. Mean annual flow data for gage number 11210950, Kaweah River below Terminus Dam, CA, <http://waterdata.usgs.gov/ca/nwis/sw>, accessed December 2008.

Western Regional Climate Center (WRCC), Desert Research Institute, 2008a. Northern California Climate Summaries, Visalia, California, <http://www.wrcc.dri.edu/summary/climsmnca.html>, accessed December 2008.

WRCC, Desert Research Institute, 2008b. Northern California Climate Summaries, Lemon Cove, California, <http://www.wrcc.dri.edu/summary/climsmnca.html>, accessed December 2008.

4.9 Land Use, Planning, and Policies

This section addresses potential impacts to land uses in the study area. The analysis considers potential impacts resulting from the construction, operation and maintenance of the Proposed Project and alternatives. Land use issues include compatibility of the proposed improvements with adjacent land uses, and potential conflicts with applicable plans and policies. This evaluation is based on review of local and regional land use plans and policies.

4.9.1 Setting

The majority of the Proposed Project and alternatives would be located within unincorporated Tulare County. Portions of the Proposed Project and alternatives would cross through the City of Visalia. Short segments of the Proposed Project would also run through the City of Farmersville and the community of Lemon Cove. The Big Creek 3 Substation is located in unincorporated Fresno County.

Existing Land Uses

Proposed Project

The Proposed Project would be located in northwestern Tulare County, California near the cities of Visalia and Farmersville. From the Rector Substation to Structure #7 (approximately 1.1 miles), the Proposed Project alignment heads north within the existing SCE right-of-way (ROW). Land uses adjacent to the ROW in this section include nut and fruit orchards. At Structure #7, the Proposed Project alignment turns due east to Structure #54. This area is characterized by row crops, including fruit, nut, olive and orange orchards, and a small amount of commercially used lands. From Structure #55, the alignment continues north to Structure #73, traversing navel orange orchards. From Structure #73, the Proposed Project alignment continues in an easterly/northeasterly direction through orchard crops (i.e., nut, orange, lemon, and olive orchards), terminating in dry pasture at its connection point at the existing Big Creek-Springville Line (see Figure 4.9-1) (Tulare County Assessor's Office, 2007). Based on a reconnaissance survey conducted by ESA staff, the Proposed Project would pass within 300 feet of approximately 87 residences, including 52 along the existing ROW and 35 along the new ROW (ESA, 2009).

The substations (i.e., Rector, Springville, Vestal, and Big Creek 3) that would receive electrical and safety upgrades as part of the Proposed Project and alternatives are located on land currently used by SCE for industrial purposes. The Big Creek 3 Substation is located within U.S. National Forest area (Fresno County Fire Department, 2009).

Alternatives 2, 3 and 6

Alternative 2 heads due north, following the existing SCE ROW from the Rector Substation for approximately 10.8 miles. The alignment passes through residential areas, fruit and olive orchards and row crops. At mile 10.8 the alignment turns east along new ROW, passing through vineyards and orange orchards for approximately 3.5 miles. At this point the route briefly turns north for

0.6 miles, and then turns in an easterly/southeasterly direction for the remainder of the alignment. From mile 14.8 to mile 23.0 (the tie-in at the Springville Transmission Line), the alignment traverses predominantly dry pasture, as well as some orange and other fruit tree orchards (Tulare County Assessor's Office, 2007). Alternative 2 would pass within 300 feet of approximately 216 residences, including 213 in the existing ROW and three in the new ROW (ESA, 2009).

Alternative 3 heads due north, following the existing SCE ROW from the Rector Substation for approximately 14.6 miles, traversing residential areas, orchards, a poultry operation, the Stone Corral Preserve, and dry pasture. At mile 14.6 the alignment turns in an east/north-easterly direction to mile 24.3 (the tie-in with the Springville Transmission Line), traversing mountains and dry pasture (Tulare County Assessor's Office, 2007). Alternative 3 would pass within 300 feet of approximately 214 residences along the existing ROW but would not pass within 300 feet of any residences along the new ROW (ESA, 2009).

Alternative 6 heads due north, following the existing SCE ROW from the Rector Substation for approximately 8.1 miles, traversing residential areas, orchards, field crops and row crops. At mile 8.1 the alignment turns due east for approximately 6.9 miles, crossing predominantly orange orchards as well as other fruit orchards. At mile 15 the alignment turns north for 2.0 miles passing through orange orchards and some field and row crops. At mile 17 the alignment turns east/north-east for 0.3 miles through dry pasture, joining with the Alternative 2 alignment. Alternative 6 would pass within 300 feet of approximately 213 residences, including 202 along the existing ROW and 11 along the new ROW (ESA, 2009).

See Figure 4.9-1 for existing land uses crossed by the Proposed Project and alternatives.

Regulatory Context

State

California Public Utilities Commission General Order No. 131-D

The California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Although such projects are exempt from local land use and zoning regulations and discretionary permitting (i.e., would require approval from a local decision-making body such as a planning commission or city council), General Order No. 131-D, Section XIV.B requires that in locating a project "the public utility shall consult with local agencies regarding land use matter." The public utility is required to obtain any required non-discretionary local permit.

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County General Plan is the County's long-range planning document and consists of eleven topical elements (provided with the element's year of adoption): Land Use (1964); Transportation/Circulation (1964); Environmental Resource Management (1972); Open

Space/Recreation/Conservation (1972); Seismic Safety (1975); Scenic Highways (1975); Water and Liquid Waste Management (1981); Urban Boundaries (1983); Aviation and Airport Systems (1985); Noise (1988); and Housing (2003) (Tulare County, 2007).

Tulare County does not have specific “land use designations” in the General Plan Land Use Element. Unincorporated communities in Tulare County have Community Plans or Area Plans, and those Community Plans have designated land uses. (The community of Lemon Cove does not have a Community Plan. As such, land use and zoning designations within Lemon Cove limits would be determined by County designations.) For all County lands within the study area, the land use designation is *Agriculture* (Washam, 2008).

In addition to the General Plan, the County also has area and sub area plans to guide planning for all areas outside incorporated cities. The study area falls within two area plans: the Rural Valley Lands Plan (1975) and the Foothill Growth Management Plan (1981). These area plans contain additional land use designations, and are discussed later in this section. (See Figure 4.9-2, General Plan Land Uses.)

The Tulare County General Plan contains the following goals, policies and objectives that would be applicable to the Proposed Project and alternatives:

Land Use and Urban Boundaries Element

Policy 1LU.A.4: The predominant agricultural character of land between communities should be preserved.

Environmental Resources Management Element

Policy 6.E.20: Service to urban areas should be coordinated so that easements can be utilized for more than one purpose and land fragmentation can be minimized. The concept of “utilidors” (utility corridors) is recommended.

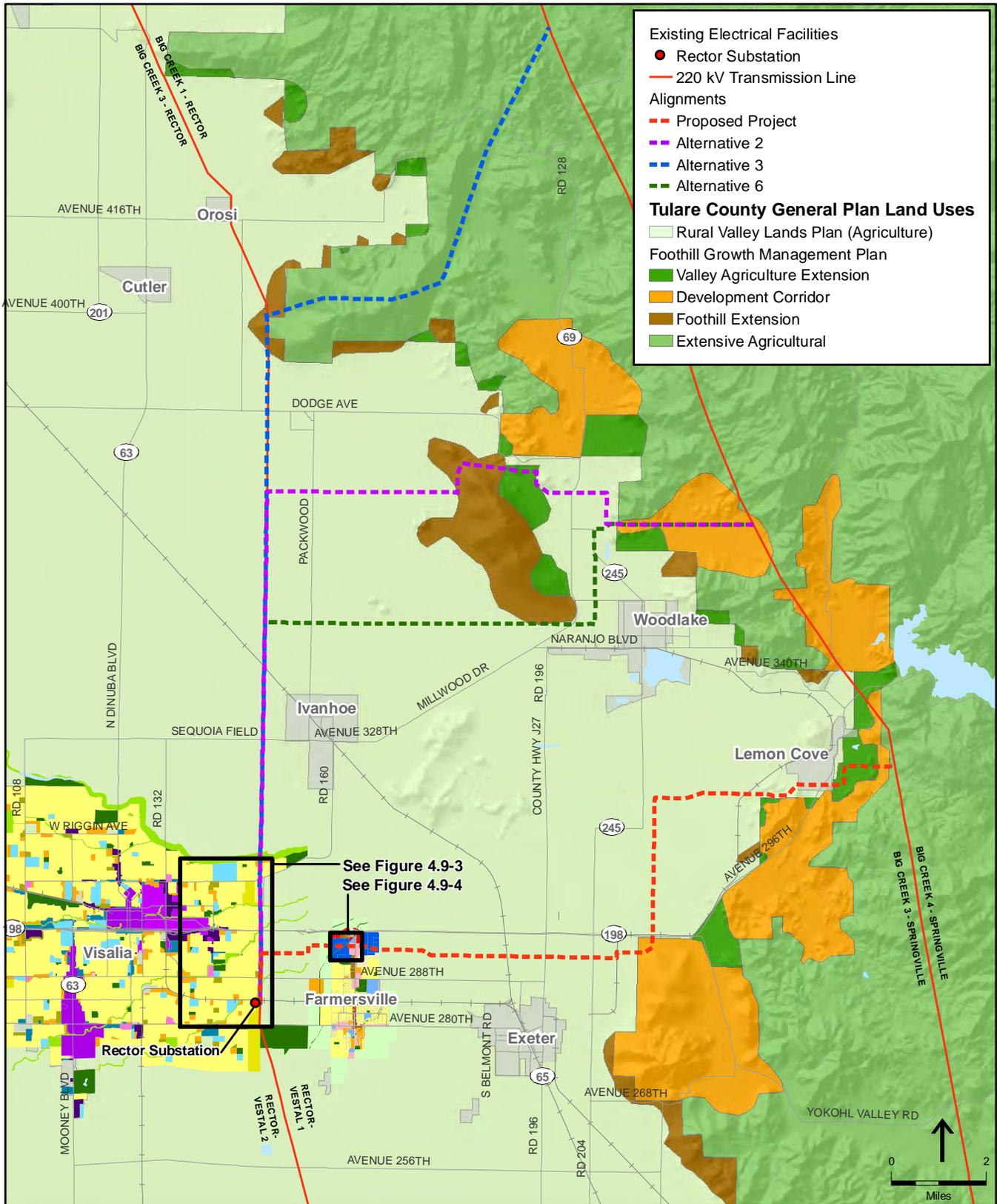
Policy 6.M.29: Coordinate public and private utility easements in order to maximize multiple use of such easements and minimize land fragmentation. The concept of “utilidors” is recommended.

Policy 6.M.30: Wherever possible, institute joint agreements with public and private agencies, which control utility easements, in order to incorporate such lands into permanent open space linkages throughout the county. Design for uses such as bicycle, horse and hiking trails or for green belt planting to enhance the visual amenities of the county.

(Tulare County, 2001).

Tulare County Rural Valley Lands Plan (Proposed Project and Alternatives 2, 3 and 6)

The Rural Valley Lands Plan (RVLP) is an area plan of the Tulare County General Plan that provides additional land use designations and policies for areas zoned for agriculture. The RVLP applies to approximately 773,500 acres of the western portion of the County and applies to areas outside the County’s planned Urban Development Boundaries for cities and unincorporated communities. The RVLP was initiated to protect and maintain agricultural viability. The RVLP both establishes minimum parcel sizes for areas zoned for agriculture and implements a policy



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; Tulare County, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.9-2
General Plan Land Uses

that supports reasonable accommodation for parcels that are not deemed suitable for agricultural activities (Tulare County, 2007).

The RVLDP designates five *Exclusive Agricultural (AE)* zones: *AE*, *AE-10*, *AE-20*, *AE-40*, and *AE-80*. Each requires a different minimum parcel size (ranging from five to 80 acres). The RVLDP also contains non-agricultural land-use designations.

The Proposed Project would cross the following RVLDP land use designations: *Agricultural (A-1)*, *AE-20*, *AE-40*, *AE-80*, and *Foothill Agriculture (AF)*. Alternative 2 would traverse *AE-20*, *AE-40*, *AE-80* and *AF* land use designations. Alternative 3 would traverse *AE-20*, *AE-40*, *AF* land use designations. Alternative 6 would traverse *AE-20*, *AE-40*, and *AF* zoning designations.

Tulare County Foothill Growth Management Plan (Proposed Project and Alternatives 2, 3 and 6)

The Foothill Growth Management Plan (FGMP) is an area plan of the Tulare County General Plan that provides development policies and standards for the foothill region of Tulare County. The Plan's policies provide guidelines for community identity, new development, recreation/open space, agriculture, environmental protection, scenic corridors protection, history/archaeology, infrastructure facilities, and public services (Tulare County, 2007).

The FGMP utilizes four land use designations, all of which would be crossed by the Proposed Project and/or an alternative:

- *Development Corridor* (Proposed Project and Alternatives 2 and 6)
- *Extensive Agriculture* (Alternatives 2, 3 and 6)
- *Foothill Extension* (Alternatives 2, 3 and 6)
- *Valley Agriculture Extension* (Proposed Project and Alternatives 2 and 6)

(Tulare County, 1998).

Tulare County Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)

The Proposed Project would traverse parcels with *Exclusive Agricultural (AE-20 and AE-40)*, *Foothill Agricultural (AF)*, *Agricultural (A-1)*, *Planned Development (PD)*, *Scenic Corridor Combining (SC)*, *Special Mobile Home (M)*, and *Service Commercial (C-3)* zoning designations. Alternative 2 would traverse parcels with *AE-20*, *AE-40*, *AE-80*, *AF*, *Primary Floodplain Combining (F-1)*, *PD*, *Foothill Combining Zone (F)*, *M*, and *Rural Residential (R-A-12.5 and R-A-43)* zoning designations. Alternative 3 would traverse parcels with *AE-20*, *AE-40*, *AF*, and *R-A-12.5* zoning designations. Alternative 6 would traverse *AE-20*, *AE-40*, *AF*, *PD*, *F*, and *M* zoning designations (Tulare County, 1999).

The *AE-20*, *AE-40*, and *AE-80* Districts are intended to be applied to land areas which are used or are suitable for use for intensive agricultural production on 20, 40, and 80 acre minimum parcels, respectively. The *AF* District is intended to be applied to agricultural and open space protection. The *A-1* District is intended to provide an area for agricultural production. The *R-A* District is for single family residential units and agricultural production (Tulare County, 2007).

The Tulare County Zoning Ordinance also contains several ‘overlay’ zones. Overlay zones combine with an underlying zoning district to provide additional development requirements for the underlying district. The *PD* District is an overlay zone intended to provide an area of planned development, and is combined with other zones to reduce development restrictions and provide for harmonious uses. The *SC* District is an overlay zone intended to provide an area for a scenic corridor, and is combined with other zones to protect the visual quality of roads. The *M* District is an overlay zone intended to provide for mobile home use in communities where such housing is desirable. The *C-3* District is intended to provide land areas for wholesale and repair services. The *F-1* overlay zone is intended to protect property in high risk flood areas. The *F* zone is intended to be combined with the *PD* zone for use within areas designated as *Development Corridor* or *Foothill Extension* by the FGMP (Tulare County, 2007).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Fresno County General Plan, adopted in 2000, is the County’s long-range planning document and consists of seven topical elements: Agriculture and Land Use, Economic Development, Health and Safety, Housing, Open Space and Conservation, Public Facilities and Services, and Transportation and Circulation (Fresno County, 2000).

Fresno County has specific land use designations in the Agriculture and Land Use Element in the General Plan. The Big Creek 3 Substation is the only portion of the Proposed Project and alternatives in Fresno County, and it is located in an area designated *Public Lands and Open Space* (Adams, 2009). This designation is applied to land or water areas that are essentially unimproved and planned to remain open in character. The designation provides for the preservation of natural resources, the managed production of resources, parks and recreation, and the protection of the community from natural and manmade hazards (Fresno County, 2000).

The Fresno County General Plan also designates Regional Plan Areas, to guide planning for all areas outside incorporated cities. The Big Creek 3 Substation is located in the Sierra-North Regional Plan Area. Consistent with the Agriculture and Land Use Element, the Substation is located on land designated *Public Lands and Open Space* in the Regional Plan. This designation is for land or water areas which are essentially unimproved and planned to remain open in character. *Public Lands and Open Space* areas are devoted to activities such as preservation of natural resources, parks and recreation, and managed production of resources, or are subject to fire, flood or geologic hazard (Fresno County, 1997).

The Fresno County General Plan and Sierra-North Regional Plan do not contain any goals, policies and objectives that would be applicable to the Proposed Project and alternatives.

Fresno County Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)

The Big Creek 3 Substation is located in an area zoned *Resource Conservation District, 40-acre minimum lot size (R-C-40)* (Adams, 2009). *R-C* districts are intended to provide for the conservation and protection of natural resources and natural habitat areas, and are accompanied by a minimum acreage designation allowing for 40, 80, or 160 acre parcels (Fresno County, 2004).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia General Plan Land Use Element designates the proposed general distribution, location, and extent of land uses for housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other categories of public and private land uses. The first 2.3 miles of the Proposed Project, which would include Structures #1 through #14, would be located on land within the jurisdiction of the City of Visalia. In addition, a small segment of the Proposed Project would be located outside City limits but within the City of Visalia's Urban Area Boundary (UAB). The UAB is an approximately 90-square mile area which represents the City's 'Sphere of Influence' or its probable ultimate physical boundary and service area.

The Proposed Project would traverse land designated by the City of Visalia General Plan for *Residential Low Density (RLD)*, *Residential High Density (RHD)*, *Urban Reserve*, and *Agriculture (Ag)*; Alternatives 2, 3 and 6 would traverse parcels designated for *RLD*, *RHD*, *Urban Reserve*, *Ag*, *Park* and *Conservation* uses (see Figure 4.9-3) (City of Visalia, 2008c).

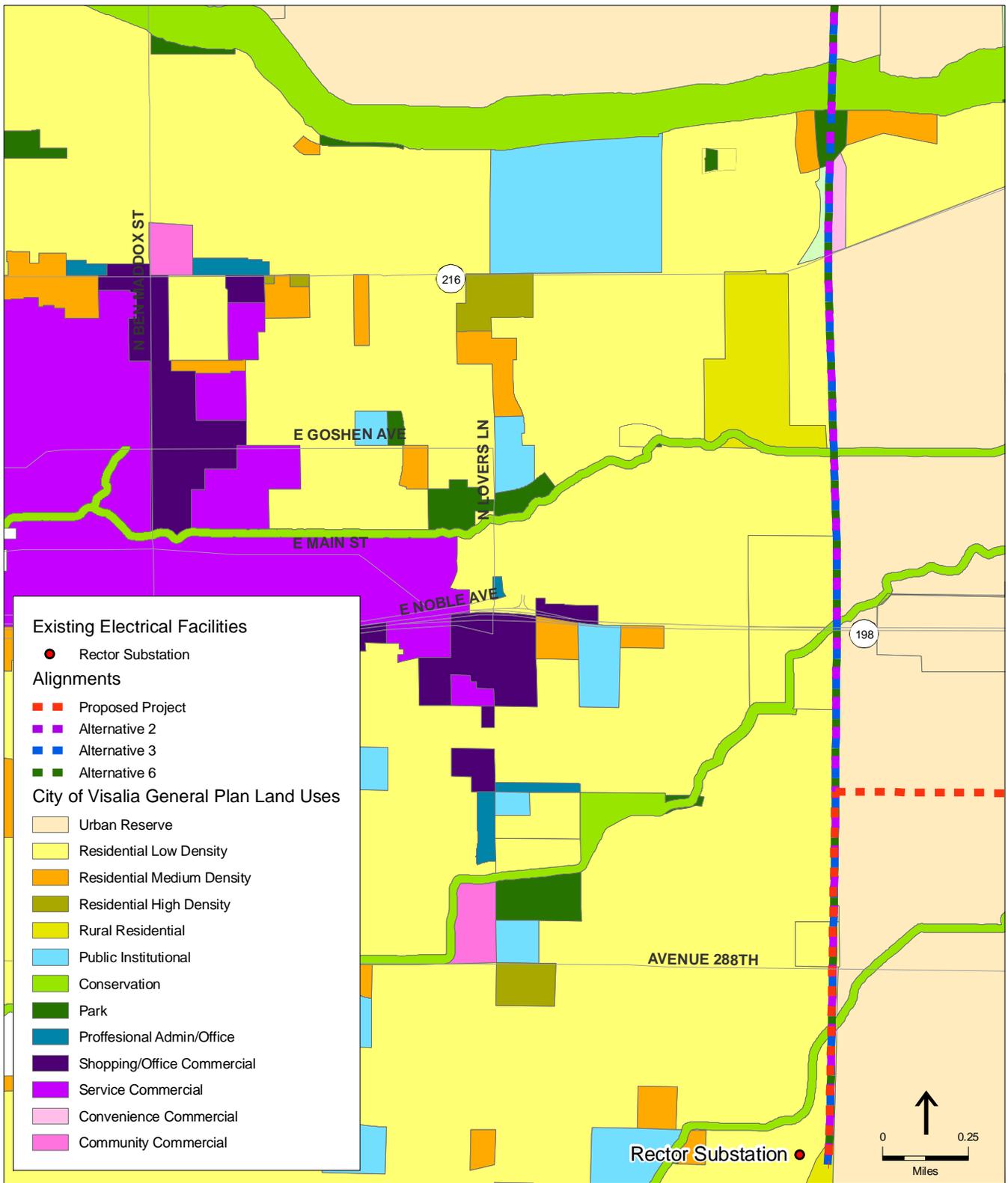
The *Ag* designation is for land primarily used for the production of food and fiber. All land outside of the Urban Development Boundary (UDB)¹ is designated *Ag* irrespective of size or actual use. The *Conservation* designation is for land reserved for preservation and enhancement of natural resources including animal life, plant life, irrigation water conveyance, ground water recharge, flood protection, and limited recreation. If conservation areas are not adversely impacted, development adjacent to these areas may be permitted. The *Park* designation is for open space land for private and public outdoor recreation purposes. The *RLD* designation is Visalia's traditional residential land use and density range. It permits two to 10 dwelling units per net acre, up to 21 persons per acre. *RHD* permits 15 to 29 dwelling units per net acre (up to 58 persons per acre). *Urban Reserve* areas are comprised of the last planning and implementation areas outside of the 129,000 population UDB (City of Visalia, 1996).

The Land Use Element of the City of Visalia General Plan contains the following goals, policies and objectives that would be applicable to the Proposed Project and alternatives:

Implementing Policy 1.1.4: Work with utilities and transportation companies to landscape power line and railroad right-of-ways throughout the community and to underground utilities and abandoned railroad spurs where possible.

Implementing Policy 1.1.5: Develop land use and site design measures for areas adjacent to high-voltage power facilities.

¹ **UDB:** These boundaries designate the estimated urbanizable area within which a full-range of urban services will need to be extended or provided to accommodate urban development through 2020. Boundaries are depicted in the City of Visalia General Plan for the years 2000, 2010 (population 129,000), and 2020 (population 165,000). The UDBs are different than the UAB, which is an approximately 90-square mile area representing the City's 'Sphere of Influence' or its probable ultimate physical boundary and service area. The land area between the UAB and the UDB is considered the 'urban fringe', and is designated for agriculture. Urban fringe is generally not suited for urban development within the Land Use Element's 30-year planning and implementation period (year 2020) (City of Visalia, 1996).



SOURCE: SCE, 2008; City of Visalia, 2009

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.9-3
City of Visalia General Plan Land Uses

Implementing Policy 4.1.16: Require special site development standards for proposed non-residential or more intensive land uses adjacent to established residential areas to minimize negative impacts on abutting properties.

(City of Visalia, 1996).

City of Visalia Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)

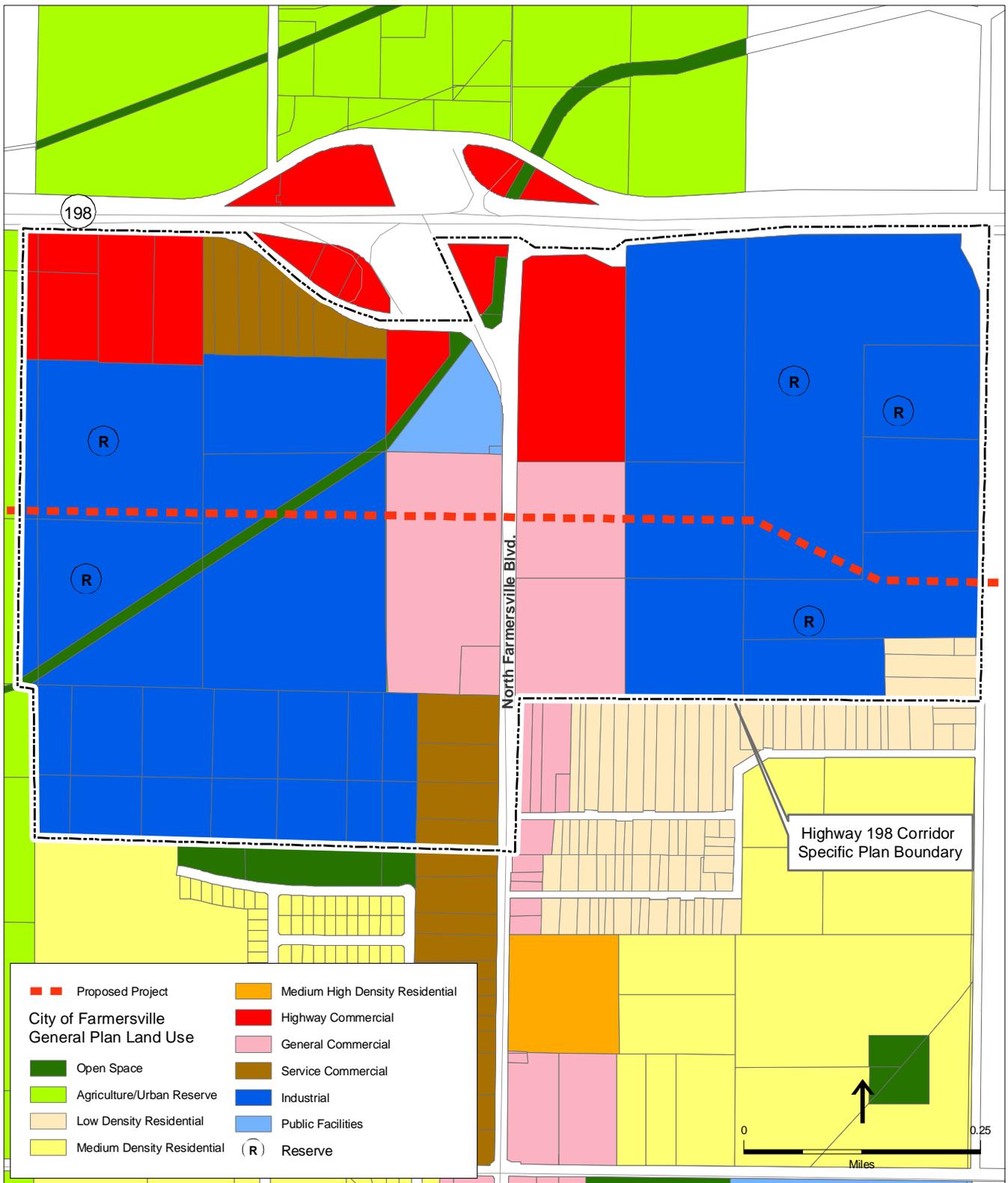
The Proposed Project and Alternatives 2, 3 and 6 would traverse parcels designated as *R-1-6*: one family residential zone, 6,000 square feet minimum site area. In addition, Alternatives 2, 3 and 6 would traverse land zoned *Quasi-public* and *Agriculture* (City of Visalia, 2008b).

The current City of Visalia Zoning Ordinance provides additional information regarding allowable uses and development standards within these designations. The *R-1* zone is intended to “provide living area within the city where development is limited to low density concentrations of one-family dwellings where regulations are designed to accomplish the following: to promote and encourage a suitable environment for family life; to provide space for community facilities needed to compliment urban residential areas and for institutions which require a residential environment; to minimize traffic congestion and to avoid an overload of utilities designed to service only low density residential use” (City of Visalia, 2008a). The *Agriculture* designation is intended to preserve lands best suited for agriculture from the encroachment of incompatible uses, and to prevent the intrusion of urban development into agricultural areas in such a manner as to make agricultural production uneconomical or impractical. The *Quasi-Public* designation is intended to allow for the location of governmental, institutional, community service, academic, and nonprofit uses (City of Visalia 2008a).

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan Land Use Element designates the proposed general distribution, location, and extent of land uses for residential, commercial, industrial, public, open space, agricultural, and other categories of public and private land uses. Miles 2.75 to 3.78 of the Proposed Project, which would include Structures #16 through #22, would be located within the Farmersville Urban Area Boundary. Structures #18 through #20 would fall within City limits. The Proposed Project would traverse land designated by the City of Farmersville General Plan for *Agriculture/Urban Reserve*, *Industrial*, and *General Commercial* uses (Figure 4.9-4) (City of Farmersville, 2002).

The *Agriculture/Urban Reserve* designation is meant to protect agriculture from urban encroachment, ensure that conflicts do not arise between agriculture and urban uses, and maintain land in agriculture until the time is appropriate for conversion to urban uses. This designation applies to lands that have the capacity to be, or are actively being farmed but are within the planning area and proposed to eventually be developed. This designation is also applied to lands with agriculturally-related uses, including cold storage operations, packing houses, or agriculturally-related businesses. *Industrial* uses include those involved in manufacturing, processing, warehousing, and certain commercial uses. Development with this designation must be landscaped, parking lots must be landscaped and constructed off-street, signs shall be regulated, storage areas must be fenced and screened, and new uses or extensive expansion of



SOURCE: SCE, 2008; City of Farmersville, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.9-4

City of Farmersville General Plan Land Uses

existing uses require site plan review or a conditional use permit, as determined by the City's Zoning Ordinance. The *General Commercial* designation is intended for properties generally located on Visalia Road and Farmersville Boulevard, outside the downtown area. The designation provides for shopping centers, offices, and retail uses. According to the Land Use Element, new development with this designation must be landscaped, have off-street parking, and signs shall be regulated and new uses or extensive expansion of existing uses require site plan review or a conditional use permit, as determined by the City's Zoning Ordinance (City of Farmersville, 2002).

The Land Use Element of the City of Farmersville General Plan contains the following goal that would be applicable to the Proposed Project:

Issue Ten, Infrastructure, Goal III: Maintain, rebuild and upgrade infrastructure systems.

(City of Farmersville, 2002).

City of Farmersville Highway 198 Corridor Specific Plan (Proposed Project)

Within the City of Farmersville's limits, the Proposed Project would traverse the area included in the City of Farmersville Highway 198 Corridor Specific Plan, adopted on June 23, 2003 and depicted in Figure 4.9-4 (City of Farmersville, 2003a). The 356-acre Plan area is generally bounded on the east by Road 168, State Route 198 (SR 198) on the north, approximately one-half mile west of Farmersville Boulevard on the west, and approximately 350 feet south of Terry Avenue on the south. The scope and purpose of the Specific Plan is twofold. First, the Plan establishes the policy framework for the long-term evolution and development of land uses and supportive infrastructure and services for the Plan Area. Second, the Plan identifies the type, nature and phasing of industrial, commercial, and public facility development in the northern part of the City (City of Farmersville, 2003b).

The Specific Plan implements goals, objectives, and action plans from the City of Farmersville General Plan Land Use Element, as well as its own goals, including:

Goal-1: The Plan Diagram, as shown in Figure 4-6, shall be regarded as prescribing the distribution of land uses for the Plan Area. The locations, patterns and development standards for streets shall be regarded as fixed by the Plan Diagram, as well. Unless otherwise prescribed by this Plan, the network of local streets and on-site circulation characteristics for any segment of the Plan Area shall be subject to City review and approval of specific development plans and designs.

(City of Farmersville, 2003b).

The Proposed Project would traverse land designated as *Industrial* and *General Commercial*. The definitions and limitations of the *Industrial* and *General Commercial* land uses in the Specific Plan are the same as in the City of Farmersville General Plan, described earlier in this document.

Retail Site Determination. Moving forward with plans for development to implement the Highway 198 Corridor Specific Plan, the City of Farmersville contracted with Buxton, Inc. to

prepare a Retail Site Determination in January 2008 (Miller, 2008). While the report identified retailers and restaurants that could be recruited to the City of Farmersville, it did not identify specific parcels for future development. According to the City of Farmersville City Manager, the Proposed Project's Structure #20 would directly bisect the preferred parcel for future development of a retail site (Miller, 2008). However, at the time of publication of this Draft EIR, no applications to develop any specific parcel(s) and/or change the existing land use designations have been received by the City (Miller, 2009); therefore potential land use conflicts associated with the implementation of the Proposed Project will not be discussed further in this EIR in either the context of existing land use or in the cumulative scenario regarding the Highway 198 Corridor Specific Plan.

City of Farmersville Zoning Ordinance (Proposed Project)

The Proposed Project would traverse land zoned by the City of Farmersville as *Urban Reserve* (U-R) (Crumly, 2008). The current City of Farmersville Zoning Ordinance provides information regarding allowable uses and development standards within this zoning designation. The purpose of the *Urban Reserve* designation is to “preserve an agricultural or open space use, land suited to eventual development in other uses until such time as streets, utilities and other community facilities may be provided or programmed so as to ensure the orderly and beneficial conversion of these lands to non-agricultural use, and to provide appropriate areas for certain predominantly open uses of land which are not injurious to agricultural uses” (City of Farmersville, 2007).

4.9.2 Significance Criteria

Based on guidance provided by the California Environmental Quality Act (CEQA) regarding what constitutes a significant environmental effect (Guidelines Section 15064, 15126, and Appendix G), a project would have a significant land use impact if it would:

- a) Physically divide an established community;
- b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.9.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on land use, planning, and/or policies.

4.9.4 Impacts and Mitigation Measures

Approach to Analysis

Although construction-related activities would not be considered to be land use impacts, activities that could affect adjacent land uses are discussed in Sections 4.1, *Aesthetics*; 4.3, *Air Quality*; 4.10, *Noise*; and 4.14, *Transportation and Traffic*. Construction-related impacts would be relatively short-term in nature (approximately nine to 12 months) and would not continue after the project begins full operation. In general, the physical construction-related effects on adjacent land uses would be less than significant. Certain physical construction-related effects would require the mitigation measures identified in the sections mentioned above to reduce those impacts to less than significant levels. For analyses and discussions of these construction-related impacts, please refer to the above-identified sections.

a) Physical division of an established community.

Impact 4.9-1: The Proposed Project could physically divide an established community. *Less than significant (Class III)*

The Proposed Project would be located within an existing or new ROW in a largely undeveloped area, though it would pass through two communities. As discussed in the Setting, the Proposed Project would pass through an undeveloped area in the northern part of the City of Farmersville. In this area, the transmission line would traverse open space and would not restrict access or constitute a physical barrier to the City. The Proposed Project would also pass through the community of Lemon Cove (a Census Designated Place in Tulare County). However, all homes in Lemon Cove would be located on the north side of the alignment, and there are no buildings currently located to the south of the Proposed Project alignment. Furthermore, the transmission line would not restrict access or constitute a physical barrier to this community. Therefore, the Proposed Project would have a less than significant impact to the physical division of an established community.

Mitigation: None required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

To determine the Proposed Project's consistency with applicable plans and policies, the following land use consistency analysis is provided. The CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project. As discussed in the Setting, although the Proposed Project would be exempt from local land use and zoning regulations and discretionary permitting, General Order No. 131-D, Section XIV.B requires that in locating a project "the public utility shall consult with local agencies regarding land use matter." Therefore, because the public utility

is exempt from local land use zoning regulations and discretionary permitting, this land use consistency analysis is provided for informational purposes only.

Impact 4.9-2: The Proposed Project could conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the Proposed Project adopted for the purpose of avoiding or mitigating an environmental effect. *Less than significant* (Class III)

Tulare County General Plan. The project applicant proposes to construct and operate a transmission line through lands within the jurisdiction of Tulare County. As discussed in the Setting, the Proposed Project would cross areas that are designated Ag (Washam, 2008). The Tulare County General Plan does not discuss the allowance or disallowance of transmission line facilities within this land use designation; however, the project applicant would obtain input from Tulare County regarding land-use matters related to the siting of the Proposed Project prior to project construction. In addition, a significant number of the parcels designated as Ag are currently under a Williamson Act contract (see Section 4.2, *Agricultural Resources*). Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use.

Tulare County Rural Valley Lands Plan. The Proposed Project would traverse parcels zoned by the RVLP as *A-1*, *AE-20*, *AE-40*, *AE-80*, and *AF*. The RVLP does not discuss the allowance or disallowance of transmission line facilities within these land use designations; it defers to the Tulare County Zoning Ordinance (discussed below).

Tulare County Foothill Growth Management Plan. The Proposed Project would traverse parcels zoned by the FGMP as *Development Corridor* and *Valley Agriculture Extension*. The FGMP does not discuss the allowance or disallowance of transmission line facilities within these land use designations; it defers to the Tulare County Zoning Ordinance (discussed below).

Tulare County Zoning Ordinance. The Proposed Project would traverse parcels zoned by the Tulare County Zoning Ordinance as *AE-20* and *AE-40*, *AF*, *A-1*, *PD*, *SC*, *M*, and *C-3* (Tulare County, 1999). Public utility structures, including transmission lines, are permitted within the *AE-20*, *AE-40*, *AF*, *A-1* and *C-3* districts subject to obtaining a Special Use Permit (Tulare County, 2005). (*PD*, *SC*, and *M* designations are overlay zones, and are combined with a base zone.) While the project applicant, in accordance with General Order 131-D, would obtain input from Tulare County regarding land use matters related to siting (i.e., location of proposed facilities), a use permit is a discretionary land use instrument, and the project applicant would not be required to obtain a use permit from Tulare County prior to project approval.

Fresno County General Plan. As discussed in the Setting, the Big Creek 3 Substation is located in an area designated *Public Lands and Open Space*. The Fresno County General Plan does not discuss the allowance or disallowance of substation facilities within this land use designation. However, the proposed modifications at the Big Creek 3 Substation would occur at a currently existing electrical substation, and would consist solely of electrical system and safety upgrades. All substation work would occur on previously disturbed areas within the existing footprint of the substation. Given the nature of the modifications, the associated construction,

operation and maintenance activities associated with the Proposed Project at the Big Creek 3 Substation would constitute a continuation of current land use at the Substation.

Fresno County Zoning Ordinance. The Big Creek 3 Substation site is zoned *R-C-40* by the Fresno County Zoning Ordinance. Neither electric distribution substations nor electric transmission substations are explicitly permitted in *R-C* zones, nor are they listed under Uses Permitted Subject to Director Review and Approval, or Uses Permitted Subject to Conditional Use Permit. Section 813.4 lists as Uses Expressly Prohibited "...industrial uses not specifically listed in Sections 8.13.1, 8.13.2, or 8.13.3". However, as discussed above, the modifications proposed by the Project would occur within the fence line of existing substation facilities, and would be considered electrical and safety upgrades. The modifications would be considered a continuation of current land use at the substation site.

City of Visalia General Plan. As discussed in the Setting, the Proposed Project would traverse land designated by the City of Visalia General Plan for *RLD*, *RHD*, *Urban Reserve*, and *Ag*. The General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Scheibel, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from the City of Visalia regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Visalia Zoning Ordinance. The Proposed Project would traverse land designated by the City of Visalia Zoning Ordinance as *R-1-6* (City of Visalia, 2008b). However, according to Section 17.02.040 G. of the City of Visalia Zoning Ordinance—Application and Interpretation—Exceptions—transmission lines are not covered under the Zoning Ordinance (Scheibel, 2008; City of Visalia, 2008a). Therefore, the Proposed Project is not in conflict with the City of Visalia Zoning Ordinance. The project applicant, in accordance with General Order 131-D, would obtain input from the City of Visalia regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville General Plan. The Proposed Project would traverse land designated by the City of Farmersville General Plan for *Industrial* and *General Commercial* uses (City of Farmersville, 2002). The General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Zoning Ordinance. The Proposed Project would traverse land designated by the City of Farmersville Zoning Ordinance as *U-R* (Crumly, 2008). Section 17.56.021, Table 2 of the Farmersville Zoning Ordinance specifies the conditions under which Conditional Use Permits are required for 'Communication and Public Utility Service Facilities' (City of Farmersville, 2007). According to the Table, 'Communication and Public Utility Service Facilities' are not permitted in *U-R* zones. However, according to a City of Farmersville planning consultant, transmission lines are, in fact, allowed under certain conditions in *U-R* zones, and the Zoning Ordinance should be amended to list 'Communication and Public Utility Service Facilities' as consistent with the *U-R* designation (Schoettler, 2008). Regardless, the project applicant would, in accordance with General

Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Highway 198 Corridor Specific Plan. The Proposed Project would traverse land designated by the City of Farmersville Highway 198 Corridor Specific Plan for *Industrial* and *General Commercial* uses (City of Farmersville, 2003b). The Specific Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from the City of Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

Mitigation: None required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

As discussed in Section 4.4, *Biological Resources*, there are no habitat conservation plans or other approved governmental habitat plans that involve lands within the Proposed Project area. Therefore, the Proposed Project would not result in any conflicts with an adopted habitat conservation plan or natural community conservation plan (No Impact).

4.9.5 Cumulative Impacts

The geographic context for the cumulative impacts associated with land use issues are the cities and unincorporated communities of western Tulare County.

As noted in Section 3.6, *Cumulative Projects*, a number of projects are planned within the project area and would have the potential to be constructed simultaneously with the Proposed Project. All potential Proposed Project land use impacts resulting from temporary construction activities, including temporary increases in noise and dust, decreased air quality from construction vehicles, odors from construction equipment, safety issues, loss of vegetation, and access issues, are analyzed in the corresponding sections of this EIR (see Sections 4.1, *Aesthetics*; 4.3, *Air Quality*; 4.4, *Biological Resources*; 4.10, *Noise*; and 4.14, *Transportation and Traffic*). From an operations and maintenance perspective, there would be no cumulatively considerable impacts because the projects discussed in Section 3.6, *Cumulative Projects*, are representative of the ongoing level of development in the region, would be located in areas away from the Proposed Project's area of impact, and would not affect the same lands. Therefore, implementation of the Proposed Project would not result in a cumulatively considerable contribution to land use and planning impacts (Class III).

4.9.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no land use impacts would occur (No Impact).

Alternative 2

Construction, operations, and maintenance activities associated with Alternative 2 would be similar to the Proposed Project. Alternative 2 would not pass through any communities; therefore, impacts relating to the physical division of an established community would be less than significant (Class III). Also like the Proposed Project, there are no habitat conservation plans or other approved governmental habitat plans that involve lands within the Alternative 2 areas (No Impact).

In Tulare County, Fresno County and the City of Visalia, land use and zoning impacts related to Alternative 2 would be the same as the Proposed Project (Class III). However, Alternative 2 would cross some different land use and zoning designations than the Proposed Project; therefore, a land use consistency analysis is provided below.

Tulare County Rural Valley Lands Plan

Like the Proposed Project, Alternative 2 would traverse parcels zoned *AE-20*, *AE-40*, *AE-80* and *AF*; therefore, Alternative 2 would be consistent with the Zoning Ordinance (see below), and therefore would not conflict with the RVLP.

Tulare County Foothill Growth Management Plan

Alternative 2 would traverse two FGMP zoning designations not traversed by the Proposed Project: *Extensive Agriculture and Foothill Extension*. The FGMP does not discuss the allowance or disallowance of transmission line facilities within these land use designations; it defers to the Tulare County Zoning Ordinance. Alternative 2 would be consistent with the Zoning Ordinance (see below), and therefore would be consistent with the FGMP.

Tulare County Zoning Ordinance

Alternative 2 would traverse five Tulare County zoning designations not traversed by the Proposed Project: *AE-80*, *F-1*, *F*, *R-A-12.5*, and *R-A-43*. Public utility structures, including transmission lines, are permitted within the districts Alternative 2 would cross, subject to obtaining a Special Use Permit (Tulare County, 2005). While the project applicant, in accordance with General Order 131-D, would obtain input from Tulare County regarding land use matters related to siting, a use permit is a discretionary land use instrument, and the project applicant

would not be required to obtain a use permit from Tulare County prior to project approval. Therefore, Alternative 2 would be consistent with the Tulare County Zoning Ordinance.

City of Visalia General Plan

Alternative 2 would traverse two Visalia General Plan land use designations not traversed by the Proposed Project: *Park* and *Conservation*. As discussed above, the General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation. As such, Alternative 2 would not conflict with the City of Visalia General Plan.

City of Visalia Zoning Ordinance

Alternative 2 would traverse two Visalia zoning designations not traversed by the Proposed Project: *Quasi-Public*, and *Agriculture*. According to Section 17.02.040 G. of the City of Visalia Zoning Ordinance, transmission lines are not covered under the Zoning Ordinance. Therefore Alternative 2 would not conflict with the City of Visalia Zoning Ordinance.

Despite crossing some different land use designations than the Proposed Project, Alternative 2 would be consistent with all local land use policies. Therefore, like the Proposed Project, overall impacts from Alternative 2 would be less than significant (Class III).

Alternative 3

Construction, operations and maintenance activities associated with Alternative 3 would be similar to the Proposed Project. Alternative 3 would not pass through any communities; therefore, impacts relating to the physical division of an established community would be less than significant (Class III). Also like the Proposed Project, there are no habitat conservation plans or other approved governmental habitat plans that involve lands within the Alternative 3 areas (No Impact).

In Tulare County, Fresno County and the City of Visalia, land use and zoning impacts related to Alternative 3 would be the same as the Proposed Project (Class III). However, Alternative 3 would cross some different land use and zoning designations than the Proposed Project; therefore, a land use consistency analysis is provided below.

Tulare County Rural Valley Lands Plan

Like the Proposed Project, Alternative 3 would traverse parcels zoned *AE-20*, *AE-40*, and *AF*; therefore, Alternative 3 would be consistent with the Zoning Ordinance (see below), and therefore would not conflict with the RVLP.

Tulare County Foothill Growth Management Plan

Alternative 3 would traverse two FGMP zoning designations not traversed by the Proposed Project: *Extensive Agriculture and Foothill Extension*. The FGMP does not discuss the allowance or disallowance of transmission line facilities within these land use designations; it defers to the Tulare County Zoning Ordinance. Alternative 3 would be consistent with the Zoning Ordinance (see below), and therefore would be consistent with the FGMP.

Tulare County Zoning Ordinance

Alternative 3 would traverse one Tulare County zoning designation not traversed by the Proposed Project: *R-A-12.5*. Public utility structures, including transmission lines, are permitted within this designation, subject to obtaining a Special Use Permit (Tulare County, 2005). While the project applicant, in accordance with General Order 131-D, would obtain input from Tulare County regarding land use matters related to siting, a use permit is a discretionary land use instrument, and the project applicant would not be required to obtain a use permit from Tulare County prior to project approval. Therefore, Alternative 3 would be consistent with the Tulare County Zoning Ordinance.

City of Visalia General Plan

Alternative 3 would traverse two Visalia General Plan land use designations not traversed by the Proposed Project: *Park and Conservation*. As discussed above, the General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation. As such, Alternative 3 would not conflict with the Visalia General Plan.

City of Visalia Zoning Ordinance

Alternative 3 would traverse two Visalia zoning designations not traversed by the Proposed Project: *Quasi-Public*, and *Agriculture*. As discussed above, transmission lines are not covered under the Zoning Ordinance. Therefore, Alternative 3 would not conflict with the Visalia Zoning Ordinance.

Despite crossing some different land use designations than the Proposed Project, Alternative 3 would be consistent with all local land use policies. Therefore, like the Proposed Project, overall impacts from Alternative 3 would be less than significant (Class III).

Alternative 6

Construction, operations and maintenance activities associated with Alternative 6 would be similar to the Proposed Project; therefore, impacts relating to the physical division of an established community would be less than significant (Class III). Also like the Proposed Project, there are no habitat conservation plans or other approved governmental habitat plans that involve lands within the Alternative 6 areas (No Impact).

In Tulare County, Fresno County and the City of Visalia, land use and zoning impacts related to Alternative 6 would be the same as the Proposed Project (Class III). However, Alternative 6 would cross some different land use and zoning designations than the Proposed Project; therefore, a land use consistency analysis is provided below.

Tulare County Rural Valley Lands Plan

Like the Proposed Project, Alternative 6 would traverse parcels zoned *AE-20*, *AE-40*, and *AF*; therefore, Alternative 6 would be consistent with the Zoning Ordinance (see below), and therefore would not conflict with the RVLP.

Tulare County Foothill Growth Management Plan

Alternative 6 would traverse two FGMP zoning designations not traversed by the Proposed Project: *Extensive Agriculture and Foothill Extension*. The FGMP does not discuss the allowance or disallowance of transmission line facilities within these land use designations; it defers to the Tulare County Zoning Ordinance. Alternative 6 would be consistent with the Zoning Ordinance (see below), and therefore would be consistent with the FGMP.

Tulare County Zoning Ordinance

Alternative 6 would traverse one Tulare County zoning designation not traversed by the Proposed Project: *F*. As discussed above, public utility structures, including transmission lines, are permitted within this designation, subject to obtaining a Special Use Permit (Tulare County, 2005). While the project applicant, in accordance with General Order 131-D, would obtain input from Tulare County regarding land use matters related to siting, a use permit is a discretionary land use instrument, and the project applicant would not be required to obtain a use permit from Tulare County prior to project approval. Therefore, Alternative 6 would be consistent with the Tulare County Zoning Ordinance.

City of Visalia General Plan

Alternative 6 would traverse two Visalia General Plan land use designations not traversed by the Proposed Project: *Park* and *Conservation*. As discussed above, the General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation. As such, Alternative 6 would not conflict with the Visalia General Plan.

City of Visalia Zoning Ordinance

Alternative 6 would traverse two Visalia Zoning designations not traversed by the Proposed Project: *Quasi-Public*, and *Agriculture*. As discussed above, transmission lines are not covered under the Zoning Ordinance. Therefore, Alternative 6 would not conflict with the Visalia Zoning Ordinance.

Despite crossing some different land use designations than the Proposed Project, Alternative 6 would be consistent with all local land use policies. Therefore, like the Proposed Project, overall impacts from Alternative 6 would be less than significant (Class III).

References – Land Use, Planning, and Policies

- Adams, John, 2009. Planner in Development Services, Fresno County Planning Department. Personal communication January 27, 2009.
- City of Farmersville, 2002. Farmersville General Plan, Adopted November 2002.
- City of Farmersville, 2003a. Minutes of a Regular Meeting of the Farmersville City Council, Monday, June 23, 2003.
- City of Farmersville, 2003b. Draft Specific Plan, City of Farmersville Highway 198 Corridor Specific Plan. Published March, 2003.
- City of Farmersville, 2007. City of Farmersville Municipal Code, Title 17—Zoning, Farmersville Zoning Ordinance. August 2007.
- City of Visalia, 1996. Land Use Element, Visalia General Plan. September 1991, Revised June 1996.
- City of Visalia, 2008a. City of Visalia Municipal Code, Title 17—Zoning. April 2008.
- City of Visalia, 2008b. City of Visalia Zoning Ordinance Map, April 2008.
- City of Visalia, 2008c. City of Visalia General Plan/Land Use and Circulation Element Map. Available at: <http://www.ci.visalia.ca.us/civica/filebank/blobdload.asp?BlobID=5032>. Accessed December 4, 2008.
- Crumly, Sarah, 2008. Management Analyst, City of Farmersville. Personal communication November 17, 2008.
- Environmental Science Associates (ESA), 2009. Site visit by ESA staff to study area, February 11, March 4, and March 5, 2009.
- Fresno County, 1997. Sierra-North Regional Plan Map. Adopted May 4, 1982. Amended March 3, 1997.
- Fresno County, 2000. Fresno County General Plan. Adopted October 2000.
- Fresno County, 2004. The Ordinance Code of the Fresno County, Part VII, Land Use Regulation and Planning, Division VI, Zoning Division. Chapter 2, Section 813. Amended March 2, 2004.
- Fresno County Fire Department, 2009. Diane Rodriguez, Fire Prevention Secretary, Fresno County Fire District/CalFire. Personal communication January 28, 2009.
- Miller, Rene, 2008. City Manager, City of Farmersville. Personal communication November 19, 2008.
- Miller, Rene, 2009. City Manager, City of Farmersville. Personal communication April 10, 2009.
- Schoettler, Carl, 2008. Contracted City Planner, City of Farmersville. Personal communication December 4, 2008.

Scheibel, Paul, 2008. Principal Planner, City of Visalia. Personal communication, December 8, 2008.

Tulare County Assessor's Office, 2007. Tulare County Existing Land Use Designations. Assessor's Property Information Management System. Available at:
<http://www.co.tulare.ca.us/government/rma/gis/gisdata.asp>. Accessed April 23, 2009.

Tulare County, 1998. Tulare County Land Use Map, 1998.

Tulare County, 1999. Tulare County Zoning Ordinance Map, 1999. Available at:
<http://www.co.tulare.ca.us/government/rma/gis/gisdata.asp>. Accessed April 23, 2009.

Tulare County, 2001. County of Tulare General Plan Policy Summary. December 2001.

Tulare County, 2005. Tulare County Zoning Ordinance. Revised September, 2005.

Tulare County, 2007. General Plan Background Report. December 2007.

Washam, Michael, 2008. Planner, Tulare County Resource Management Agency (RMA).
Personal communication November 20, 2008.

4.10 Noise

This section evaluates potential impacts on ambient noise levels from construction and operation of the Proposed Project and alternatives. The analysis presented below is based on review of the Proponent's Environmental Assessment (SCE, 2008), ambient noise measurements taken near the Proposed Project and alternative alignments, and local noise ordinances and regulations set by cities and the counties in the study area.

4.10.1 Setting

Noise Background

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).

Noise Exposure and Community Noise

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. In fact, community noise varies continuously with time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. Background noise levels change throughout a typical day, but do so gradually, corresponding with the addition and subtraction of distant noise sources and atmospheric conditions. The addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) makes community noise constantly variable throughout a day.

These successive additions of sound to the community noise environment vary the community noise level from instant to instant requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

L_{eq} : The equivalent sound level is used to describe noise over a specified period of time, in terms of a single numerical value. The L_{eq} is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

L_{max} : The instantaneous maximum noise level measured during the measurement period of interest.

L_{dn} : The energy average of the A-weighted sound levels occurring during a 24-hour period, and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (“penalizing” nighttime noises). Noise between 10 p.m. and seven a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises.

CNEL: Similar to the L_{dn} , the Community Noise Equivalent Level (CNEL) adds a five dBA penalty for the evening hours between seven p.m. and 10 p.m. in addition to a 10 dBA penalty between the hours of 10 p.m. and seven a.m.

Effects of Noise on People

The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers at industrial plants often experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way the new noise compares to the existing noise levels that one has adapted, which is referred to as the “ambient noise” level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of one dBA cannot be perceived;
- Outside of the laboratory, a three dBA change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;

- A change in level of at least five dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. A ruler is a *linear* scale: it has marks on it corresponding to equal quantities of distance. One way of expressing this is to say that the ratio of successive intervals is equal to one. A *logarithmic* scale is different in that the ratio of successive intervals is not equal to one. Each interval on a logarithmic scale is some common factor larger than the previous interval. A typical ratio is 10, so that the marks on the scale read: 1, 10, 100, 1,000, 10,000, etc., doubling the variable plotted on the x-axis. The human ear perceives sound in a non-linear fashion, hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Point sources of noise, including stationary mobile sources such as idling vehicles or onsite construction equipment, attenuate (lessen) at a rate of six dBA to 7.5 dBA per doubling of distance from the source, depending upon environmental conditions (e.g., atmospheric conditions, noise barriers, type of ground surface, etc.). Widely distributed noises such as a large industrial facility spread over many acres or a street with moving vehicles (a “line” source) would typically attenuate at a lower rate of approximately three to 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions) (Caltrans, 1998).

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the affect of vibration on the human body. The RMS amplitude is the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2006). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

Existing Ambient Noise Environment

The Proposed Project and Alternatives 2, 3, and 6 would be located in Tulare County, California. The Big Creek 3 Substation, located in Fresno County, would also undergo minor modifications as part of the Proposed Project and alternatives. The Proposed Project corridor would cross

through the eastern edge of the City of Visalia and through the northern edge of the City of Farmersville. This corridor would include approximately 1.1 miles of construction within existing SCE right-of-way (ROW) and 17.4 miles of construction through agricultural and open space lands. Alternative 2 would utilize approximately 10.8 miles of existing SCE ROW and would pass through approximately four miles of orchards, five miles of open space and would pass near the community of Elderwood before entering the foothills of the Sierra Nevada. Alternative 3 would utilize 14.6 miles of existing SCE ROW and would cross approximately 9.7 miles of open space through the Sierra Nevada foothills. Alternative 6 would utilize 8.1 miles of existing SCE ROW and would cross through approximately 9.2 miles of orchards and 3.2 miles of open space. A number of rural residences are present in the vicinity of the Proposed Project and the alternatives.

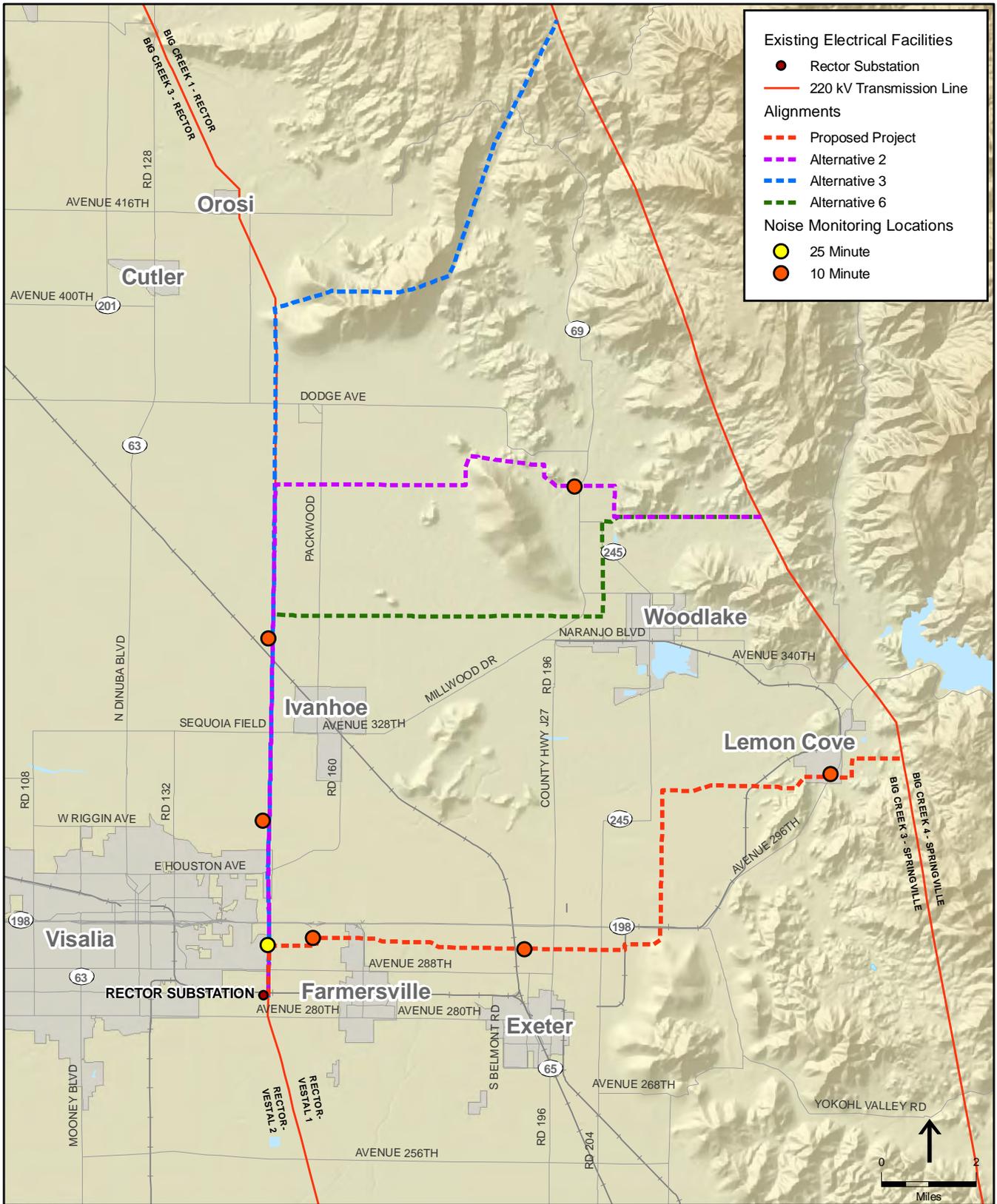
Much of the study area is typified by relatively low (40 to 55 dBA) noise levels due to the lack of loud noise sources. The main contributors to the noise environment along the corridors described above include roadway noise and agricultural equipment. Additional noise sources may include electrical and industrial devices and other man-made localized sources. Vehicle and overflight noises can range from approximately 50 to 80 dBA, depending on the distance from the source. Ambient natural noise sources such as wind can be expected to generate noise levels in the range of 45 to 55 dBA.

Twenty four hours of continuous noise data were collected to help characterize the ambient L_{dn} and CNEL in the study area. Figure 4.10-1 shows the location where the 24-hour noise measurement was taken. Table 4.10-1 displays the hourly L_{eq} as well as the L_{dn} and CNEL for this monitoring site. As shown in the table, noise levels are generally low in the existing ROW with a L_{dn} and CNEL of approximately 53 dBA.

Ten-minute average noise measurements were taken along the Proposed Project and alternative alignments to determine typical short-term noise levels in the study area. Figure 4.10-1 shows the locations at which 10-minute average measurements were collected. Table 4.10-2 displays the L_{eq} and L_{max} for these 10-minute measurements. As shown, ambient L_{eq} noise levels in the study area were between 43.8 and 60.0 dBA. The predominant noise source at most of the noise monitoring locations was vehicle traffic on nearby roadways.

Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause physiological and psychological stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate are also sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive.



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; ESA, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.10-1
Noise Monitoring Locations

**TABLE 4.10-1
AMBIENT NOISE LEVELS – 24-HOUR MEASUREMENT**

Hour	L _{eq}	L _{max}
12:00 a.m.	43.6	53.2
1:00 a.m.	43.1	48.6
2:00 a.m.	43.8	47.2
3:00 a.m.	43.2	53.8
4:00 a.m.	43.5	51.3
5:00 a.m.	46.1	63.5
6:00 a.m.	47.8	60.7
7:00 a.m.	46.9	53.3
8:00 a.m.	45.9	53.1
9:00 a.m.	53.0	72.9
10:00 a.m.	54.6	69.8
11:00 a.m.	51.1	71.6
12:00 p.m.	47.6	67.0
1:00 p.m.	46.4	59.3
2:00 p.m.	47.7	60.7
3:00 p.m.	51.3	80.2
4:00 p.m.	51.4	63.6
5:00 p.m.	50.6	61.8
6:00 p.m.	49.4	58.2
7:00 p.m.	47.8	57.6
8:00 p.m.	47.7	53.6
9:00 p.m.	47.5	53.3
10:00 p.m.	47.3	55.7
11:00 p.m.	44.9	54.5
	L_{dn}	53
	CNEL	53

NOTE: Measurements began at 4:00 p.m. on September 17th and concluded at 4:00 p.m. on September 18th, 2008.

Proposed Project

There are a number of residences located within 200 feet of the first 1.1 miles of the Proposed Project. There are also rural residences scattered intermittently along the remaining 17.4 miles of new ROW that would be acquired by SCE. Some of these residences are located within 50 feet of the Proposed Project ROW.

Union Elementary School, on Road 148 just north of East Caldwell Avenue, is approximately 1,500 feet south of the Rector Substation. New Structure #58 would be approximately 1,000 feet east of Kaweah High School and New Structure #92 would be approximately 1,000 feet south of Sequoia Union School. New Structures #18 and #19 would be approximately 1,500 feet north of Liberty Park.

**TABLE 4.10-2
10-MINUTE AVERAGE AMBIENT NOISE LEVELS IN THE STUDY AREA**

#	Measurement Location	Time	L _{eq}	L _{max}	Description of Noise Sources
Proposed Project					
1	Along Road 156 near New Lattice Tower 14.	10:45 a.m.	55.2	66.6	Vehicle traffic along Road 156 was the predominant noise source.
2	Along Filbert Road between New TSP Structure 39 and 40.	11:10 a.m.	50.1	67.7	Vehicle traffic along Filbert Road was the predominant noise source. Other noise sources observed included a rooster crowing and operation of a weed whacker at a nearby residence.
3	Along Avenue 296 near New TSP Structure 94.	11:37 a.m.	60.0	76.4	Vehicle traffic along Avenue 296 was the predominant noise source.
Alternative 2					
4	Along Millwood Drive approximately 0.25 miles north of Avenue 368.	12:13 p.m.	55.2	70.6	Some roadway traffic was observed (an average of about one car per minute).
Alternative 2, 3, & 6					
5	At the intersection of Avenue 344 and Road 148 underneath existing 220kV transmission line.	12:56 p.m.	43.8	56.4	Transmission line humming was the predominant noise source. Relatively little vehicle traffic was observed.
6	At the intersection of Avenue 313 and Road 148.	2:07 p.m.	53.8	65.3	Vehicles traveling along Avenue 313 were the predominant noise source.

NOTE: Short-term (10-minute) measurements were collected on September 18, 2008.

Alternative 2

The first 1.1 miles of Alternative 2 would pass by the same residential units as the Proposed Project, and then rather than heading east, Alternative 2 would continue in existing SCE ROW passing directly adjacent to a number of existing residential developments for the next three miles. The next 6.7 miles of the alignment would also be located within existing ROW and would pass within close proximity to a few rural residences. Approximately 10.8 miles north of the Rector Substation, Alternative 2 would leave the existing ROW and turn east toward the-tie in location at the Big Creek-Springville line, passing by a few residences located near the Community of Elderwood.

In addition to residential receptors, Alternative 2 would pass approximately 1,000 feet east of a church located on Race Avenue.

Alternative 3

Alternative 3 would pass by the same residential units as the Proposed Project for the first 1.1 miles. Then it would continue north within the existing SCE ROW for another 14.6 miles. For the first three miles north of the Proposed Project turning point, Alternative 3 would be located directly adjacent to a number of existing residential developments. However, as it continues

north, it would pass fewer rural residences. At mile 14.6, Alternative 3 would turn east and then northeast for 9.7 miles passing primarily through open space land to reach the tie-in location at the Big Creek-Springville line.

In addition to residential receptors, Alternative 3 would pass within 1,000 feet of the church located on Race Avenue.

Alternative 6

Alternative 6 would pass by the same residential units as the Proposed Project for the first 1.1 miles. Continuing north, Alternative 6 would remain in existing SCE ROW for an additional seven miles, the first three miles of which would be directly adjacent to a number of existing residential developments. The following four miles in existing SCE ROW would be located near a few rural residences. At mile 8.1, Alternative 6 would turn east for 6.9 miles through orchards, passing within close proximity to a few rural residences. The alignment would then turn north for approximately two miles, again passing by a few rural residences. From here the alignment would turn east, crossing through open space until it reached the tie-in location at the Big Creek-Springville line.

In addition to residential receptors, Alternative 6 would pass within 1,000 feet of the church located on Race Avenue.

Regulatory Context

Federal, State, and local agencies regulate different aspects of environmental noise. Federal and State agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities.

Tulare County (Proposed Project and Alternatives 2, 3 and 6)

Section 4 of the Tulare County General Plan provides a framework for addressing and minimizing noise impacts. The following policies identified in the General Plan Noise Element may be applicable to the Proposed Project and alternatives:

Policy 4.A.1: Areas within Tulare County shall be designated as noise-impacted if exposed to existing or projected future noise levels at the exterior of buildings which exceed 60 dB L_{dn} (or CNEL).

Policy 4.B.1: New development of industrial, commercial or other noise-generating land uses will not be permitted if resulting noise levels will exceed 60 dB L_{dn} (or CNEL) at the boundary of areas planned and zoned for residential or other noise-sensitive land uses, unless determined to be necessary to promote public health, safety and welfare to the County.

(County of Tulare, 2001).

Fresno County (Proposed Project and Alternatives 2, 3 and 6)

Municipal Code

As stated under Section 8.40.060 of the Fresno County Municipal Code, noise sources associated with construction activities are exempt from exterior noise level standards provided that such activities do not take place before six a.m. or after nine p.m. on weekdays or before seven a.m. or after five p.m. on Saturdays or Sundays. Furthermore, noise sources associated with work performed by private or public utilities in the maintenance or modification of its facilities are also exempt from exterior noise limits (County of Fresno, 2008).

General Plan

The Fresno County General Plan Health and Safety Element include goals that aim to “protect residential and other noise sensitive uses from exposure to harmful and annoying noise levels; to identify maximum acceptable noise levels compatible with various land use designations; and to develop a policy framework necessary to achieve and maintain a healthful noise environment”. The following policy may be applicable to the Proposed Project and alternatives:

Policy HS-G.6: The County shall regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County’s Noise Control Ordinance.

(County of Fresno, 2000).

City of Visalia (Proposed Project and Alternatives 2, 3 and 6)

Municipal Code

Table 4.10-3 presents the exterior noise level standards for fixed noise sources as set forth in Section 8.36.040 of the City of Visalia Municipal Code. These standards are not applicable to mobile sources such as construction equipment. However, Section 8.36.050 of the Municipal Code prohibits the operation of construction equipment between the weekday hours of seven p.m. and six a.m., and between the weekend hours of seven p.m. and nine a.m. (City of Visalia, 2008).

**TABLE 4.10-3
CITY OF VISALIA EXTERIOR NOISE LIMITS**

Category	Cumulative number of minutes in any one-hour time period	Noise Level (dBA)	
		Evening and Daytime (six a.m. to seven p.m.)	Nighttime (seven p.m. to six a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

SOURCE: City of Visalia, 2008.

General Plan

The City of Visalia General Plan Noise Element includes the following goals: (1) protect citizens from harmful effects of exposure to excessive noise; (2) protect the City's economic base by preventing the encroachment of incompatible land uses near known noise producing industries, railroads, airports and other sources; and (3) protect existing and future noise-sensitive land uses from encroachment and exposure to excessive levels of noise. The following policies from the Noise Element may be applicable to the Proposed Project and alternatives:

Policy 1.1: Areas within Visalia shall be recognized as noise impacted if exposed to existing or projected future noise levels at the exterior of buildings which exceed 65 dB L_{dn} (or CNEL).

Policy 1.3: New development of industrial, commercial or other noise generating land uses (including roadways, railroads, and airports) should be discouraged if resulting noise levels will exceed 65 dB L_{dn} (or CNEL) at the boundary areas of planned or zoned residential or other noise sensitive land uses.

(City of Visalia, 1995).

City of Farmersville (Proposed Project)

Section 9.04.040 of the City of Farmersville Municipal Code limits noise levels from fixed noise sources to 50 dBA during nighttime hours and 65 dBA during daytime hours when measured at the property lines of noise sensitive receptors. Section 9.04.050 of the Municipal Code prohibits the use of construction equipment between the weekday hours of nine p.m. and six a.m., and between the weekend hours of nine p.m. and nine a.m. (City of Farmersville, 2003).

4.10.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, a project impact would be considered significant if it would:

- a) Expose people to or generate noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies;
- b) Expose people to or generate excessive groundborne vibration or groundborne noise levels;
- c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels;
- f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

For the purposes of this EIR, temporary impacts during construction are considered significant if they would substantially interfere with affected land uses. Substantial interference could result from a combination of factors including: the generation of noise levels substantially greater than existing ambient noise levels, construction efforts lasting long periods of time, or construction activities that would affect noise-sensitive uses during the nighttime.

The Proposed Project's long term operational impacts on the ambient noise environment would be considered substantial if it would expose sensitive receptors or other identified land uses to noise levels in excess of regulatory standards or codes. In addition to concerns regarding the absolute noise level that might occur when a new source is introduced into an area, it is also important to consider the existing ambient noise environment. If the ambient noise environment is quiet and the new noise source greatly increases the noise exposure, even though a criterion level might not be exceeded, an impact may occur.

A numerical threshold to identify the point at which a vibration impact occurs has not been identified by local jurisdictions in the applicable standards or municipal codes. In the absence of local regulatory significance thresholds for vibration from construction equipment, it is appropriate to use a California Department of Transportation (Caltrans) identified PPV thresholds for human perception and risk of architectural damage to buildings, which are 0.010 inches per second and 0.20 inches per second, respectively (Caltrans, 2002).

4.10.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce noise impacts from construction, operation, and maintenance of the Proposed Project.

4.10.4 Impacts and Mitigation Measures

Approach to Analysis

Equipment noise during project construction would be the primary concern in evaluating short-term noise impacts. Noise from corona discharge along high-voltage transmission lines in wet conditions would be the primary concern associated with long-term noise impacts. In addition, maintenance activities would include use of a light duty truck and/or helicopter to conduct routine annual inspections of the transmission line.

Evaluation of potential noise impacts from Proposed Project construction, operation and maintenance included reviewing relevant city and county noise standards and policies, characterizing the existing noise environment throughout the Proposed Project area, and projecting noise from construction, operation and maintenance of the Proposed Project. Impacts were assessed by comparing the published noise levels of construction equipment and operational activities to the ambient noise environment and significance criteria, based on applicable noise regulations.

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Construction

Construction activities located in the City of Visalia would be limited to between the hours of six a.m. and seven p.m. on weekdays and between the hours of nine a.m. and seven p.m. on weekends per the City's Municipal Code. In the City of Farmersville, construction activities would be restricted pursuant to the City's Municipal Code to between the hours of six a.m. and nine p.m. on weekdays and nine a.m. to nine p.m. on weekends. Tulare County does not have a noise ordinance and does not set specific restrictions on construction noise. Fresno County restricts construction hours to between the hours of six p.m. and nine p.m. on weekdays and between the hours of seven a.m. and five p.m. on Saturdays and Sundays.

As identified in Section 2.7.3, *Construction Workforce and Equipment*, construction activities are proposed to occur between the hours of seven a.m. and five p.m., Monday through Friday. If SCE determines that different work hours or days would be necessary that would violate a local noise ordinance, it would be required to obtain noise ordinance variances from the jurisdictions where the work would take place pursuant to regulatory requirements. Therefore, construction activities would not conflict with applicable noise ordinances and plans, and no impacts would occur (No Impact).

Operations

The primary noise source from operation of the Proposed Project would be associated with corona discharge. The term corona is used to describe the breakdown of air into charged particles caused by the electrical field at the surface of conductor. Audible noise levels generated by corona discharge vary depending on weather conditions as well as voltage of the line. Wet weather conditions often increase corona discharge due to accumulation of raindrops, fog, frost or condensation on the conductor surface which causes surface irregularities thereby promoting corona discharge.

In the first 1.1 miles of Proposed Project ROW, two existing single circuit transmission lines would be replaced with one double circuit line, and a new double circuit line would be added. This would double the energy-carrying capacity of the lines in the existing ROW, and would therefore have the potential to increase noise levels associated with transmission line operation. Furthermore, the Proposed Project would transverse 17.4 miles of new ROW and would represent a new permanent noise source in the area.

Based on noise modeling conducted by CH2M Hill, corona noise levels that would be generated by the Proposed Project during wet conditions would be approximately 37 dBA at the edge of the existing ROW and approximately 35 dBA at the edge of new ROW to be acquired (CH2M Hill, 2008). Assuming that the noise levels presented above would remain constant for 24 hours, the CNEL would be approximately 44 dBA at the edge of the existing ROW and 42 dBA at the edge of new ROW during wet conditions. These noise levels would not violate exterior noise standards set forth in the Tulare County General Plan, the City of Visalia Municipal Code or the

Farmersville Municipal Code. Therefore, project operations would not conflict with applicable noise ordinances and plans, and no impacts would occur (No Impact).

Maintenance

Maintenance activities would include annual visual inspections of the transmission line and access/spur roads constructed as part of the Proposed Project. These activities would require use of a light duty truck and/or helicopter, which would temporarily increase noise levels in the immediate vicinity of the Proposed Project. These activities would occur infrequently and would not result in any long-term notable noise level increases. Therefore, maintenance activities would not conflict with applicable noise ordinances and plans, and no impact would occur (No Impact).

b) Expose people to or generate excessive groundborne vibration or groundborne noise levels.

Impact 4.10-1: Blasting activities could expose people and/or structures to substantial vibration levels. *Less than significant with mitigation* (Class II)

Blasting activities may be required during road construction, grading, and foundation work in some locations if rock is present. Blasting activities typically generate the most noticeable vibrations associated with construction activities. Areas where blasting would be utilized have not been determined; therefore, it is difficult to assess the potential impacts on sensitive receptors and existing structures from groundborne vibration that would be caused by blasting activities. As described in Chapter 2, *Project Description*, prior to blasting, a person licensed by the Federal Bureau of Alcohol, Tobacco, and Firearms would assess the area and take site measurements in order to engineer the blast for a safe and effective explosion. Furthermore, pre-blast notification would be made to the local fire department, residents, utilities, and others potentially affected by blasting operations. Although SCE has committed to taking precautions, implementation of Mitigation Measure 4.10-1, below, would be required to set forth appropriate performance criteria and to ensure that vibration impacts associated with blasting would be reduced to less than significant levels.

Mitigation Measure 4.10-1: SCE and/or its contractors shall develop and implement a Blasting Plan for construction activities. The plan shall be submitted for review and approval by the CPUC. At a minimum, the plan shall include the following measures:

- Evidence of licensing, experience, and qualifications of blasters.
- A Blast Survey Workplan shall be prepared by the blaster. The Plan shall establish vibration limits in order to protect structures from blasting activities and identify specific monitoring points. At a minimum, a pre-blast survey shall be conducted of any potentially affected structures and underground utilities within 500 feet of a blast area, as well as the nearest commercial or residential structure, prior to blasting.
- The survey shall include visual inspection of the structures, documentation of structures by means of photographs, video, and a level survey of the ground floor of

structures or the crown of major and critical utility lines, and these shall be submitted to the City. This documentation shall be reviewed with the individual owners prior to any blasting operations. The CPUC and impacted property owners shall be notified at least 48 hours prior to the visual inspections.

- Scaled drawings of blast locations, and neighboring buildings, streets, or other locations that could be inhabited.
- Blasting notification procedures, lead times, and list of those notified. Public notification to potentially affected vibration receptors describing the expected extent and duration of the blasting.
- Description of blast vibration monitoring program.
- Vibration and settlement threshold criteria (for example PPV of 0.2 inches per second) shall be submitted by the blaster to the CPUC for review and approval during the design process. If the settlement or vibration criteria are exceeded at any time or if damage is observed at any of the structures or utilities, then blasting shall immediately cease and the CPUC immediately notified. The stability of any structures, creek canals, etc. shall be monitored and any evidence of instability due to blasting operations shall result in immediate termination of blasting. The blaster shall modify the blasting procedures or use alternative means of excavating in order to reduce the vibrations to below the threshold values, prevent further settlement, slope instability, and/or to prevent further damage.
- Post-construction monitoring of structures shall be performed to identify (and repair if necessary) all damage, if any, from blasting vibrations. Any damage shall be documented by photograph, video, etc. This documentation shall be reviewed with the individual property owners.
- Reports of the results of the blast monitoring shall be provided to the CPUC, the local fire department, and owners of any buried utilities on or adjacent to the site within 24 hours following blasting. Reports documenting damage, excessive vibrations, etc. shall be provided to the CPUC and impacted property owners.

Significance after Mitigation: Less than Significant.

Impact 4.10-2: Conventional construction activities could expose people and/or structures to substantial vibration levels. *Less than significant* (Class III)

Other temporary sources of groundborne vibration and noise during construction would result from operation of conventional heavy construction equipment such as drill rigs, bulldozers, and loaded haul trucks. Typical PPV levels from drill rigs and bulldozers measured at 25 feet from the source are approximately 0.089 inches per second while typical PPV levels from loaded haul trucks are approximately 0.076 inches per second at 25 feet (FTA, 2006). These vibration levels would not have the potential to cause structural damage to nearby buildings. However, they could potentially be perceptible at residences or other sensitive uses in the immediate vicinity of the construction corridor.

Construction activities would not be concentrated at the same location for an extended period of time; rather, they would progress in a linear fashion along the Proposed Project alignment such that an individual receptor would not be exposed to groundborne vibration for longer than a few days. Therefore, impacts would be less than significant.

Mitigation: None required.

c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact 4.10-3: Corona noise levels could increase ambient noise levels in the vicinity of the new transmission line ROW. Less than significant (Class III)

As discussed in more detail under item a), the only permanent noise source included as part of the Proposed Project would be the hissing and crackling associated with corona discharge. As identified in Tables 4.10-1 and 4.10-2, the measured ambient average noise levels in the Proposed Project area are between approximately 43 and 60 dBA. Worst case corona discharge noise levels that would be associated with the Proposed Project are estimated to average up to 37 dBA. Although corona discharge noise levels would likely be audible within the immediate vicinity of the Proposed Project alignment, they would not be expected to permanently increase ambient noise levels in the project vicinity; therefore, impacts would be less than significant.

Mitigation: None required.

d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Noise sources of concern associated with construction and operation of the Proposed Project include construction equipment noise, construction blasting activities, corona discharge associated with operation of high-voltage transmission lines, and vehicle noise associated with routine inspection and maintenance of new transmission lines.

Impact 4.10-4: Construction equipment would generate noise levels that would adversely affect nearby sensitive receptors. Less than significant with mitigation (Class II)

Construction of the Proposed Project would result in temporary increases to ambient noise levels associated with operation of heavy duty construction equipment. Table 4.10-4 lists heavy duty construction equipment that would likely be required onsite as well as typical noise levels for each piece of equipment measured at 50 feet from the source. As shown, equipment noise levels at construction sites would range from 80 dBA to up to 98 dBA during pole and tower foundation drilling activities.

**TABLE 4.10-4
TYPICAL MAXIMUM NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

Construction Equipment	Noise Level (dBA, L_{eq} at 50 feet)
Line Truck	88
Backhoe	80
Flatbed Truck	88
Drill Rig	98
Air Compressor	81
Dozer	85
Air Compressor	85
Mobile Crane	83
Grader	85
Front End Loader	85
Water Trucks	88
Cranes	83
Concrete Trucks	88

SOURCE: FTA, 2006.

As discussed previously, 10-minute average ambient noise levels measured in the Proposed Project ROW ranged from 55.2 dBA to 60.0 dBA. It can therefore be assumed that noise sources such as those shown in Table 4.10-4 would have the potential to impact nearby sensitive receptors.

Construction would also cause off-site noise, primarily from commuting workers and from trucks that would bring materials to the construction sites. In addition, a helicopter would be needed to help string the conductors on the new 220 kV towers and poles. Based on the analysis of a similar project, operation of a light-duty helicopter can be expected to generate noise levels of approximately 80 dBA at 200 feet (CPUC, 2006). These noise levels would have the potential to impact nearby sensitive receptors.

Equipment staging would occur at existing commercial facilities if possible. From these points, some workers would drive or ride in construction vehicles to work areas along the transmission line ROW. Trucks would haul poles, tower components, conductor line, and other materials to the various construction sites and would also haul away demolished electrical equipment and excavated material and waste. The peak noise levels associated with passing trucks and commuting worker vehicles would be approximately 75 dBA at 50 feet and would therefore have the potential to cause temporary increases to ambient noise levels at sensitive receptors.

Construction would occur at each pole site in batches (i.e., holes would be drilled and foundations poured for all pole sites, then all poles would be constructed and then the line would be strung). Therefore, equipment used to construct poles would not remain at one site for an extended period of time, thereby limiting the amount of time any individual receptor would be exposed to elevated noise levels. In addition, construction activities are proposed to occur between the hours of seven a.m. and five p.m., Monday through Friday; however, SCE has indicated that different construction work hours or days may be necessary. If nighttime (e.g., between 8:00 p.m. and 6:00 a.m.)

construction activities are determined to be necessary, such activities could result in a significant nuisance to nearby residences.

Implementation of Mitigation Measure 4.10-4a would require pre-construction notification to nearby receptors, and would require appropriate noise mitigation measures such as maintaining equipment mufflers and shielding compressors and other small stationary equipment. Mitigation Measure 4.10-4b would require the development and implementation of a nighttime noise reduction plan should construction activities be required after 8:00 p.m. and/or before 6:00 a.m. These measures would help reduce noise levels generated by construction equipment and would ensure that construction noise would not represent a significant nuisance to nearby receptors. Furthermore, these measures would aid in the reduction of ground borne vibration impacts as discussed above under Impact 4.10-2.

Therefore, impacts related to the construction activities associated with the Proposed Project would be less than significant with mitigation.

Mitigation Measure 4.10-4a: SCE and/or its contractors shall employ the following noise reduction and suppression techniques during project construction to minimize the impact of temporary construction-related noise on nearby sensitive receptors:

- All construction equipment mufflers comply with manufacturers' requirements.
- Nearby residents shall be notified of the construction schedule and how many days they may be affected by construction noise prior to commencement of construction activities. Notices sent to residents shall include a project hotline where residents would be able to call and issue complaints. All calls shall be returned by SCE and/or its contractor within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC weekly.
- Idling of engines shall be minimized; engines shall be shut off when not in use except in cases where idling is required to ensure safe operation of equipment or when idling is necessary to accomplish work for which the piece of equipment was designed (such as operating a crane).
- Compressors and other small stationary equipment shall be shielded with portable barriers when operated within 100 feet of residences.

Mitigation Measure 4.10-4b: In the event that nighttime (i.e., between 8:00 p.m. and 6:00 a.m.) construction activity is determined to be necessary, a nighttime noise reduction plan shall be developed by SCE and submitted to the CPUC for review and approval. The noise reduction plan shall include a set of site-specific noise attenuation measures that apply state of the art noise reduction technology to ensure that nighttime construction noise and levels and associated nuisance are reduced to the most extent feasible.

The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are determined by SCE to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the nighttime noise reduction plan.

- Plan construction activities to minimize the amount of nighttime construction.
- Offer temporary relocation of residents within 200 feet of nighttime construction areas.
- Temporary noise barriers, such as shields and blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., drilling rigs, generators, pumps, etc.).
- Install temporary noise walls that blocks the line of sight between nighttime activities and the closest residences.
- The notification requirements identified in Mitigation Measure 4.10-4a shall be extended to include residences within 1,000 feet of pending nighttime construction activities.

Significance after Mitigation: Less than Significant.

Impact 4.10-5: Blasting activities could expose people to substantial noise levels. *Less than significant with mitigation (Class II)*

Blasting activities may be required during road construction, grading, and foundation work in some locations if rock is present. Blasting can generate instantaneous noise levels of up to 115 dBA at 50 feet. Areas where blasting would be utilized have not been specifically identified; therefore, it is difficult to assess the potential impacts on sensitive receptors that would be caused by blasting activities. As described in Chapter 2, *Project Description*, prior to blasting, pre-blast notification would be made to the local fire department, residents, utilities, and others potentially affected by blasting operations. Although SCE has committed to taking precautions, implementation of Mitigation Measure 4.10-5 (see below) would be required to set forth appropriate performance criteria and to ensure that noise impacts associated with blasting would be reduced to less than significant levels.

Mitigation Measure 4.10-5: SCE and/or its contractors shall, at a minimum, include the following measures within the Blasting Plan described under Mitigation Measure 4.10-1 (above).

- Methods of matting or covering of blast area to prevent excessive air blast pressure.
- Description of air blast monitoring program.

Significance after Mitigation: Less than significant.

Impact 4.10-6: Inspection and maintenance activities associated with project operations could cause periodic increases in ambient noise levels that could negatively affect nearby receptors. *Less than significant (Class III)*

As discussed above, maintenance activities associated with the Proposed Project would require use of a light duty truck and/or helicopter to inspect new transmission lines and access/spur roads. These activities would result in a temporary increase in noise levels. However, vehicles would be turned off when stops are made to inspect facilities, thereby limiting the amount of time that any one receptor would be exposed to increased noise levels. Therefore, it can be concluded that inspection and maintenance activities would not expose sensitive receptors to excessive noise levels, and impacts would be less than significant.

Mitigation: None required.

e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels.

The Proposed Project would not be located within a proposed or existing airport land use plan area or within two miles of a public airport or public use airport; therefore, there would be no impact associated with this criterion (No Impact).

f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The Proposed Project would not be located within the vicinity of a private airstrip. Therefore, there would be no impacts associated with this criterion (No Impact)

4.10.5 Cumulative Impacts

Noise levels tend to lessen quickly with distance from a source; therefore, the geographic scope for cumulative impacts associated with noise would be limited to projects located within one mile of the Proposed Project. Construction of the Proposed Project would result in a potentially significant impact associated with construction equipment and blasting noise and vibrations; however, this impact would be reduced to less than significant with mitigation. Operation and maintenance activities associated with the Proposed Project would not result in permanent increases to existing noise levels and impacts would be less than significant.

As discussed in Section 3.6, *Cumulative Projects*, there are a number of projects located within one mile of the Proposed Project that are reasonably foreseeable and would have the potential to be constructed simultaneously with the Proposed Project. Examples of such projects include the State Route 65 road widening and resurfacing as well as a number of proposed and approved residential subdivisions in the City of Visalia and the City of Farmersville. If construction of any of these projects were to occur simultaneously with construction of the Proposed Project, the potential for impacts to nearby receptors from construction noise would increase. However, as discussed previously, the human ear perceives noise in a logarithmic fashion rather than a linear fashion. Therefore if a new noise source is introduced near an existing source and the two produce equal noise levels, the ambient noise level would increase by approximately three dB rather than doubling. Based on this information, even if the Proposed Project would be constructed simultaneously with another project in the immediate vicinity, substantial increases in noise levels at nearby receptors would not be expected to occur.

Therefore, when considered in combination with these projects, the Proposed Project's incremental contribution to temporary noise impacts from construction, with proposed mitigation, would not be cumulatively considerable. Furthermore, the main noise source from operation of the Proposed Project would be corona discharge; however, corona discharge would not substantially increase ambient noise levels and would therefore not result in a cumulatively considerable contribution to noise impacts. Moreover, maintenance activities would include infrequent inspection of the lines and would also not result in a cumulatively considerable contribution to noise impacts. Therefore, construction, operation and maintenance of the Proposed Project would not result in a cumulatively considerable impact (Class II).

4.10.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no noise or vibration impacts would occur (No Impact).

Alternative 2

Noise impacts from construction, operation and maintenance of Alternative 2 would generally be the same as those anticipated from the Proposed Project. However, Alternative 2 would pass by a greater number of residential receptors than the Proposed Project, and would therefore be more likely to expose people to increased noise levels. Therefore, construction activities associated with Alternative 2 would be more likely to expose sensitive receptors to excessive noise levels and groundborne vibration. However, as with the Proposed Project, implementation of Mitigation Measures 4.10-1, 4.10-4a, 4.10-4b, and 4.10-5 would reduce impacts from construction of Alternative 2 to less than significant (Class II).

As with the Proposed Project, the primary noise source from operation of Alternative 2 would be corona discharge. Similarly to the Proposed Project, maximum CNEL associated with corona discharge would be approximately 44 dBA at the edge of the ROW and would occur only during wet weather conditions. Therefore, operation of Alternative 2 would neither violate any exterior noise level standards nor would it permanently increase ambient noise levels in the project vicinity. Maintenance activities would involve the same activities as the Proposed Project, and would therefore not be expected to result in a permanent increase to ambient noise levels. Impacts would be less than significant (Class III).

Alternative 3

Noise impacts from construction, operation and maintenance of Alternative 3 would generally be the same as those anticipated from the Proposed Project. Alternative 3 would pass by a greater number of residential receptors than the Proposed Project, and would therefore be more likely to expose people to increased noise levels. Therefore, while construction activities associated with Alternative 3 would result in similar noise levels as the Proposed Project, these activities would also pass within close proximity to a greater number of sensitive receptors. Therefore, the potential to expose sensitive receptors to excessive noise levels and groundborne vibration during construction would be higher under implementation of Alternative 3. However, as with the Proposed Project, implementation of Mitigation Measures 4.10-1, 4.10-4a, 4.10-4b, 4.10-5 would reduce impacts from construction of Alternative 3 to less than significant (Class II).

As with the Proposed Project, the primary noise source from operation of Alternative 3 would be corona discharge. Similarly to the Proposed Project, maximum CNEL associated with corona discharge would be approximately 44 dBA at the edge of the ROW and would occur only during wet weather conditions. Therefore, operation of Alternative 3 would not violate any exterior noise level standards nor would it permanently increase ambient noise levels in the project vicinity. Maintenance activities would involve the same activities as the Proposed Project, and would therefore not be expected to result in a permanent increase to ambient noise levels. Impacts would be less than significant (Class III).

Alternative 6

Noise impacts from construction, operation and maintenance of Alternative 6 would generally be the same as those anticipated from the Proposed Project. Alternative 6 would pass by a greater number of residential receptors than the Proposed Project, and would therefore be more likely to expose people to increased noise levels. Therefore, while construction activities associated with Alternative 6 would result in similar noise levels as the Proposed Project, these activities would also pass within close proximity to a greater number of sensitive receptors. Therefore, the potential to expose sensitive receptors to excessive noise levels and groundborne vibration during construction would be higher under implementation of Alternative 6. However, as with the

Proposed Project, implementation of Mitigation Measures 4.10-1, 4.10-4a, 4.10-4b, 4.10-5 would reduce impacts from construction of Alternative 6 to less than significant (Class II).

As with the Proposed Project, the primary noise source from operation of Alternative 6 would be corona discharge. Similarly to the Proposed Project, maximum CNEL associated with corona discharge would be approximately 44 dBA at the edge of the ROW and would occur only during wet weather conditions. Therefore, operation of Alternative 6 would not violate any exterior noise level standards nor would it permanently increase ambient noise levels in the project vicinity. Maintenance activities would involve the same activities as the Proposed Project, and would therefore not be expected to result in a permanent increase to ambient noise levels. Impacts would be less than significant (Class III).

Alternative 6 would be located within two miles of an airport (i.e., approximately 1.5 miles north of Woodlake Airport); however, it would not involve the development of noise-sensitive land uses, and thus, would not expose people to excessive aircraft noise. As identified for the Proposed Project, there would be no impact under Alternative 6 associated with exposing people to excessive airport noise (No Impact).

References – Noise

- California Department of Transportation (Caltrans), 1998. *Technical Noise Supplement*, 1998.
- California Public Utilities Commission (CPUC), 2006. Draft Environmental Impact Report for the Antelope Transmission Project, Segments 2 & 3. Page C.10-17. August, 2006.
- Caltrans, 2002. *Transportation Related Earthborne Vibrations (Caltrans Experiences)*. Technical Advisory, Vibration TAV-02-01-R9601. February 20, 2002.
- CH2M Hill, 2008. *Cross Valley Transmission Line Project - Corona Noise Modeling Technical Memorandum*. Prepared for SCE, May 12, 2008.
- City of Farmersville, 2003. *City of Farmersville Municipal Code, Chapter 9.04*, March 2003.
- City of Visalia, 1995. *City of Visalia Noise Element to the General Plan*, November 1995.
- City of Visalia, 2008. *City of Visalia Municipal Code, Chapter 8.36, Noise*. Accessed online (<http://www.amlegal.com/library/ca/visalia.shtml>) August 25, 2008.
- County of Fresno, 2000. *Fresno County General Plan, Health and Safety Element*, October 2000.
- County of Fresno, 2008. *Fresno County Ordinance, Chapter 8.40 Noise Control*. Accessed online (<http://municipalcodes.lexisnexis.com/codes/fresno/>) December 1, 2008.
- County of Tulare, 2001. *County of Tulare General Plan Policy Summary, Section 4 – Noise*. December 2001.
- Federal Transit Administration (FTA), 2006. *Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06)*, May 2006.

4.11 Population and Housing

4.11.1 Setting

Components of the Proposed Project would be constructed in the cities of Visalia and Farmersville in Tulare County, as well as unincorporated areas of Tulare County including the community of Lemon Cove, a census-designated place (CDP). The majority of the Proposed Project would be constructed in the County.

Population

Tulare County is located in the southern end of Central California, and over the past two decades has experienced steady growth. According to the Tulare County Association of Governments (TCAG), the County's population increased by approximately 27 percent in the 1980s, from 245,738 in 1980 to 311,921 in 1990. The 2000 population estimate was 368,021 persons, which further increased the population by approximately 18 percent (TCAG, 2003).

The Proposed Project is located in northern Tulare County. The incorporated cities of Visalia and Farmersville followed similar trends for population growth as the County within the same time period. Table 4.11-1 shows the United States Census Bureau (U.S. Census Bureau) 2000 population estimates and demographics for Tulare County, the cities of Visalia and Farmersville, and the community of Lemon Cove.

**TABLE 4.11-1
YEAR 2000 POPULATIONS AND DEMOGRAPHICS**

	Tulare County	Visalia	Farmersville	Lemon Cove (CDP)
Total Population	368,021	91,565	8,737	298

SOURCE: U.S. Census Bureau, 2000.

As demonstrated in Table 4.11-2, which shows historic and estimated future population growth from 1980 to 2025, the population in these communities is expected to substantially increase over the next 20 years (TCAG, 2008a).

Housing

According to the U.S. Census Bureau, as of 2000, Tulare County had approximately 119,639 total housing units with approximately eight percent of these dwelling units vacant (U.S. Census Bureau, 2000). Table 4.11-3 shows housing data for the cities of Farmersville, Visalia, the community of Lemon Cove, and Tulare County.

**TABLE 4.11-2
HISTORIC AND ESTIMATED FUTURE POPULATION GROWTH, 1980–2025**

Area	1980	1990	% Change 1980–1990	2000	% Change 1990–2000	2005	% Change 2000–2005	2010	% Change 2005–2010	2015	% Change 2010–2015	2025	% Change 2015–2025
Tulare County	245,738	311,921	27	368,021	18	410,393	12	466,893	14	514,910	10	629,252	22
Visalia	49,729	75,636	52	91,565	21	111,034	21	124,585	12	139,626	12	176,077	26
Farmersville	5,544	6,235	12	8,737	40	10,405	19	12,272	18	14,502	18	20,089	39
Lemon Cove (CDP)	N.D.	232	N.D.	298	28	330	11	350	6	380	9	N.D.	N.D.

N.D. = No Data Available

SOURCE: State of California, Department of Finance 2008; TCAG, 2008a.

**TABLE 4.11-3
YEAR 2000 HOUSING DATA**

	Tulare County	Visalia	Farmersville	Lemon Cove (CDP)
Total Housing Units	119,639	32,795	2,288	171
Occupied Housing Units	110,385	30,941	2,153	135
Vacant Housing Units	9,254	1,854	135	36
Owner-Occupied Housing Units	56,796	17,651	1,352	71
Renter-Occupied Housing Units	41,080	11,422	674	32

SOURCE: U.S. Census Bureau, 2000.

As demonstrated in Table 4.11-4, the number of households in the cities and communities of Tulare County is estimated to have increased from 2000 to 2003 (TCAG, 2003).

None of the cities or communities (unincorporated areas) within the study area has a large seasonal population that own second homes or vacation homes in the area.

**TABLE 4.11-4
HOUSEHOLD ESTIMATES: 2000 TO 2008**

Year	Tulare County	Visalia	Farmersville	Lemon Cove (CDP)
2000	110,385	31,027	2,151	121
2001	111,468	31,513	2,173	N.D.
2002	113,002	32,232	2,204	N.D.
2003	114,628	33,009	2,247	N.D.
2008	139,359	42,434	2,673	N.D.

N.D. = No Data Available

SOURCE: TCAG, 2003; TCAG, 2008b.

Regulatory Context

CEQA Guidelines Section 15126.2 requires a discussion of the ways in which a project could directly or indirectly foster economic development or population growth, and how that growth would, in turn, affect the surrounding environment. The following regulatory context is provided to set forth the planning framework that is anticipated under the General Plans for Tulare County and the cities of Visalia and Farmersville.

Local

Tulare County General Plan Update (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County General Plan does not include any goals, objectives, and policies related to population/housing that would be applicable to the Proposed Project or alternatives (Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Fresno County General Plan does not include any goals, objectives, and policies related to population/housing that would be applicable to the Proposed Project or alternatives (Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia General Plan does not include any applicable goals, objectives, and policies related to population/housing that would be applicable to the Proposed Project or alternatives (City of Visalia, 1996).

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan does not include any applicable goals, objectives, and policies related to population/housing that would be applicable to the Proposed Project or alternatives (City of Farmersville, 2002).

4.11.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, an impact resulting from the Proposed Project would be considered significant if it would:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

4.11.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE for reducing impacts to population and housing.

4.11.4 Impacts and Mitigation Measures

Approach to Analysis

This impact analysis considers the potential effects on population and housing from activities associated with the construction, operation, and maintenance of the Proposed Project.

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact 4.11-1: The Proposed Project could induce substantial population growth in an area, either directly or indirectly. *Less than significant (Class III)*

Construction of the Proposed Project is needed to allow SCE to continue to provide safe and reliable electrical service in its Electrical Needs Area (see Figure 2-1 in Chapter 2, *Project Description*), and to increase transmission capacity to mitigate existing overload conditions. Therefore, the Proposed Project is designed to increase reliability and accommodate existing and planned electrical load growth, rather than to induce growth.

Growth is anticipated in the project area, as described above in Section 4.11.1. This growth is planned and regulated by applicable local planning policies and zoning ordinances and the Proposed Project's provision of electrical service is consistent with development anticipated by plans and zoning in the jurisdictions that the Proposed Project would serve. Additionally, the availability of electrical capacity by itself does not normally ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth.

After construction is complete, the Proposed Project facilities would not be manned and would receive only occasional routine maintenance or emergency repairs. Implementation of the Proposed Project would not result in any additional long-term staffing increases at any of the substations where activities would occur. Therefore, the Proposed Project would not induce long-term population growth, either directly or indirectly, in the project area. There would be no impacts related to long-term population growth in the project area.

Construction activities in the project area are expected to last approximately nine to 12 months, beginning in October 2011 and concluding in late 2012. During peak construction activities, approximately 50 crew members per day would be required. This includes the seven-person crews anticipated for the proposed modifications at the Springville, Vestal, and Big Creek 3 Substations. It is expected that at least 30 to 40 of the craft personnel would be from the contractor's pool of experienced personnel, with the remaining construction personnel coming from local sources.

As discussed in Chapter 2, *Project Description*, construction crews would be based out of a variety of locations that may include, but not be limited to, SCE's Santa Clarita and/or San Joaquin Valley facilities, SCE's Alhambra and/or Fullerton facilities, and the San Joaquin Valley or adjacent areas. This would result in some need for temporary accommodations during construction. However, there are numerous hotels and motels within the City of Visalia, greater Tulare County, and Fresno County to accommodate the need. Therefore, implementation of the Proposed Project is not expected to result in any significant increase to the local population or housing market, and would not indirectly induce growth by creating new opportunities for local industry or commerce. As such, there would be less than significant impacts related to short-term population growth in the project area.

Mitigation: None required.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Impact 4.11-2: The Proposed Project could displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. *Less than significant* (Class III)

The Proposed Project's transmission lines would be constructed within 1.1 miles of existing SCE right-of-way (ROW), as well as 17.4 miles of new ROW, generally paralleling local, county and State roads as well as traversing open space and agricultural areas. Construction of the Proposed Project would displace one residential housing unit, located adjacent to Structure #38. Therefore, the Proposed Project would have an impact with regard to the displacement of existing housing; however, it would not be substantial. Moreover, because Tulare County has an almost eight percent residential unit vacancy rate (U.S. Census Bureau, 2006), it is anticipated that construction of replacement housing elsewhere would not be necessary.

Mitigation: None required.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact 4.11-3: The Proposed Project could displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. *Less than significant* (Class III)

As noted above, the Proposed Project would displace one existing housing unit. It would consequently displace the resident(s) of this housing unit. From a CEQA perspective, this does not rise to the level of displacement of substantial numbers of people. Moreover, as stated above, construction of the Proposed Project would not eliminate other housing or any other structures

that are currently used by people. Therefore, because Tulare County has an almost eight percent residential unit vacancy rate, it is anticipated that construction of replacement housing elsewhere would not be necessary.

Mitigation: None required.

4.11.5 Cumulative Impacts

The geographic context for the cumulative impacts associated with population and housing issues are the cities and unincorporated communities of western Tulare County, which assumes full build-out of the Proposed Project, in combination with build-out of the projects listed in Section 3.6, *Cumulative Projects*. Tulare County is expected to undergo substantial growth over the next two decades. By 2025, the population of Tulare County is expected increase over 53 percent from 2005 levels to 629,252 persons (TCAG, 2008a). The projects listed in Section 3.6, *Cumulative Projects*, include numerous phased subdivisions for single- and multi-family residences, as well as the Yokohl Ranch Project, a master planned community that would include phased development of 10,000 residential units, approximately 550,000 square feet of mixed use commercial space, public/quasi public areas, and infrastructure such as roads and utilities. These projects, as well as other future development, would be subject to the applicable city and/or County planning process, as well as environmental review on a project-by-project basis. As such, build-out of the projects listed in Section 3.6, *Cumulative Projects* would not be likely to result in the inducement of substantial direct or indirect population growth in the area beyond what is planned. Furthermore, the Proposed Project is designed to increase reliability and accommodate existing and planned electrical load growth, rather than to induce growth. Therefore, the Proposed Project represents no incremental contribution to a potential growth impact and would not result in a cumulatively considerable impact in regards to population and housing (Class III).

4.11.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no population or housing impacts would occur (No Impact).

Alternative 2

As with the Proposed Project, implementation of Alternative 2 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation

and maintenance activities associated with Alternative 2 would be the same as under the Proposed Project. Compared to the Proposed Project, Alternative 2 requires the removal of an additional 158 existing towers and the construction of an additional 44 towers and poles. As such, total project construction of Alternative 2 is estimated to be approximately 20 months, which is eight months longer than the Proposed Project. However, the additional construction time necessary for Alternative 2 would not induce substantial population growth directly or indirectly; therefore, impacts related to population and housing would be the same as under the Proposed Project. Moreover, Alternative 2 would avoid displacing any housing units or people, including the one residential housing unit located adjacent to Proposed Project Structure #38, which would be displaced by the Proposed Project. Impacts to population and housing under Alternative 2 would be less than significant and require no mitigation (Class III).

Alternative 3

As with the Proposed Project, implementation of Alternative 3 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation and maintenance activities associated with Alternative 3 would be the same as under the Proposed Project. Alternative 3 would require the removal of an additional 216 existing towers and the construction of an additional 79 towers and poles, compared to the Proposed Project. Consequently, total project construction of Alternative 3 is estimated to be approximately 24 months, which is 12 months longer than the Proposed Project. However, the additional construction time necessary for Alternative 3 would not induce substantial population growth directly or indirectly; therefore, impacts related to population and housing would be the same as under the Proposed Project. Moreover, Alternative 3 would avoid displacing any housing units or people, including the one residential housing unit located adjacent to Proposed Project Structure #38 that would be displaced by the Proposed Project. Impacts to population and housing under Alternative 3 would be less than significant and require no mitigation (Class III).

Alternative 6

As with the Proposed Project, implementation of Alternative 6 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation and maintenance activities associated with Alternative 6 would be the same as under the Proposed Project. Compared to the Proposed Project, it is estimated that Alternative 6 would require the removal of more existing towers and the construction of more poles, though it would require the construction of fewer towers. Total project construction of Alternative 6 is estimated to be approximately 16 months, which is four months longer than the Proposed Project. However, the additional construction time necessary for Alternative 6 would not induce substantial population growth directly or indirectly; therefore, impacts related to population and housing would be the same as under the Proposed Project. Moreover, Alternative 6 would avoid displacing any housing

units or people, including the one residential housing unit located adjacent to Proposed Project Structure #38 that would be displaced by the Proposed Project. Impacts to population and housing under Alternative 6 would be less than significant and require no mitigation (Class III).

References – Population and Housing

City of Farmersville, 2002. *Farmersville General Plan*. Adopted November 2002.

City of Visalia, 1996. *Land Use Element to the Visalia General Plan*. Adopted September 1991, Revised June 1996.

Fresno County, 2000. *Fresno County General Plan*. Adopted October 2000.

State of California, Department of Finance. 2008. *Table E-4 Historical Population Estimates*. <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E4/E4-70-80/E4CALL.HTM#tab76to80>, accessed August 4, 2008.

Tulare County, 2001. *County of Tulare, General Plan Policy Summary*. December 2001.

Tulare County Association of Governments (TCAG), 2003. *Tulare County Data Book, 2003 Edition*. <http://www.tularecog.org/census/2003%20data%20book.pdf>, accessed August 18, 2008.

TCAG, 2008a. *Table 2: Historical City/County Population Estimates, 1991-2007, with 1990 and 2000 Census Counts*. Data provided by Mark Hays, October 8, 2008.

TGAG, 2008b. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2008*. Data provided by Rachel Audino, November 3, 2008.

United States Census Bureau (U.S. Census Bureau), 2000. American FactFinder 2000 Data Set. Webpage available at: <http://factfinder.census.gov>, accessed August 1, 2008.

U.S. Census Bureau, 2006. American FactFinder, 2006 Data Set, Tulare County. <http://factfinder.census.gov>, accessed November 4, 2008.

4.12 Public Services

This section analyzes the impact of the Proposed Project and alternatives on the provision of public services in unincorporated Tulare County and the cities of Visalia and Farmersville, and identifies adverse physical impacts to the environment that could result from a need to provide new or physically altered public facilities resulting from the Proposed Project and alternatives. This analysis reviews fire protection and emergency medical response, police services, schools and other public facilities. Park and recreational facilities are discussed in Section 4.13, *Recreation*.

4.12.1 Setting

Fire Protection and Emergency Medical Services

The California Department of Forestry and Fire Protection (Cal Fire [formerly CDF]), the Tulare County Fire Department, the City of Visalia Fire Department, and the City of Farmersville Fire Department provide fire protection and emergency services in the study area.

State

Cal Fire is responsible for State Responsibility Areas (SRAs), and primarily fights wildland fires; Cal Fire is not responsible for structural fires. The Cal Fire Tulare Unit, which serves the study area, is comprised of eight stations in the following locations: Badger, Fountain Springs, Hot Springs, Porterville, Springville, Three Rivers, Visalia, and Woodlake, as well as additional crews at Mountain Home Camp. The Unit is equipped with 11 engines, two bulldozers, and an Air Attack (small airplane) and tanker on contract. In addition to station personnel, office staff, and administrators, the Cal Fire Tulare Unit is comprised of: one Unit Chief, four Division Chiefs, eight Battalion Chiefs, five Apparatus Engineers, and 30 Fire Captains. The Unit hires additional staff during summer months, including limited term engineers and captains. The Cal Fire Tulare Unit responded to 101 fire calls in the first 10 months of 2008, in addition to other assisting calls (Granillo, 2008).

Local

Tulare County

The Tulare County Fire Department (TCFD) provides services to the residents and visitors of Tulare County. Its services include responding to fires, medical emergencies, motor vehicle accidents, technical rescues and other life threatening or dangerous conditions as the lead agency, or in support of that agency having jurisdiction. The TCFD consists of 28 fire stations; Battalion 1 covers the northern portion of the County with 13 fire stations, while Battalion 2 covers the southern portion of the County with 15 fire stations. Equipment includes 84 vehicles ranging from light duty utility vehicles to large aerial fire fighting apparatuses. Field personnel is comprised of six Battalion Chiefs, 21 Fire Captains, 51 Fire Lieutenants and approximately 400 reserve fire fighting personnel. Staffing at the County's 28 fire stations varies from one staff person supported by reserve firefighters to all reserve staffing. The TCFD adheres to staffing and response time goals of the National Fire Protection Association Standards. Fire protection

services within the vicinity of the Proposed Project are provided by Visalia Fire Station #1, Exeter Fire Station #11, and Lemon Cove Fire Station #13 (TCFD, 2008).

The TCFD's Emergency Fire Communication Center (Fire Com) performs emergency dispatching services for numerous fire departments and districts within Tulare County including: the TCFD, City of Farmersville Fire Department, City of Exeter Fire Department, Woodlake Fire Protection District, City of Lindsay Fire Department, Three Rivers Volunteer ambulance, the California Hot Springs Ambulance, and Camp Nelson Volunteer Ambulance. Fire Com is staffed with eight full-time employees and a varying number of extra help dispatchers. On average, Fire Com dispatches approximately 14,000 incidences per year (TCFD, 2008).

City of Visalia

The City of Visalia Fire Department provides services to approximately 35 square miles, and 118,000 residents. Its services include fire suppression, emergency preparedness, emergency medical services, fire prevention and public education to the community of Visalia. Equipment includes five fire engines, one ladder truck, two Aircraft Rescue and Fire Fighting (ARFF) apparatuses, one hazardous materials response vehicle, three reserve fire engines, and one reserve ladder truck. The Visalia Fire Department has five fire stations throughout the City, which collectively are staffed by one Fire Chief, two Administrative Battalion Chiefs, two Fire Inspectors, two support staff, three Battalion Chiefs, 18 Captains, 18 Fire Engineers, and 24 firefighters (City of Visalia Fire Department, 2008).

City of Farmersville

The City of Farmersville Fire Department provides services to the City of Farmersville and surrounding Tulare County areas for approximately 10,500 residents in a two and a half square mile area. Its services include fire suppression, emergency preparedness, emergency medical services, fire prevention and public education. The Department has a fire station located at 909 West Visalia Road in the City of Farmersville and is equipped with two fire engines. The Department is staffed by two full-time fire officers and 22 volunteer firefighters, including one Fire Chief, one Lieutenant, and four engineers. At least one fire officer is on duty 24 hours per day. On average, the Department responds to approximately 900 alarms per year (Crivello, 2008).

Police Protection

Tulare County

The Tulare County Sheriff's Department has five divisions: Operations, Operations-Administration, Investigations, Detentions-Operations, and Detentions-Administration/Court Services. Each division is commanded by one captain, and is divided into units made up of lieutenants, sergeants and civilian supervisors (Tulare County Sheriff's Department, 2008). The Department includes five Captains, six Lieutenants, 18 Sergeants, 95 Deputies, 20 dispatchers, and a number of Reserve Deputies (Douglas, 2008).

The central headquarters for the Sheriff's Department is located at 2404 West Burrel Avenue in Visalia. This location also houses the Department's Visalia Substation, Records, Dispatch and

Main Jail facilities. Operating through a decentralized patrol plan, the Department has four substations located within the County. The substations are located in Visalia, Pixley (161 North Pine Street), Porterville (379 North 3rd Street) and Cutler (40765 Road 128). The Department provides court security to all County courts, maintains all County jails and provides law enforcement services to unincorporated areas in Tulare County. The Department does not have contract cities, since cities in the County that are incorporated, including Porterville, Lindsay, Exeter, Woodlake, Dinuba, Visalia, Tulare and Farmersville, have their own full law enforcement agencies. However, the Tulare County Sheriff's Department does provide assistance to these cities on an as-needed/requested basis (Douglas, 2008).

Agriculture-related crime is addressed through two venues: the Tulare County Sheriff's Department's Agricultural Crimes Investigation Unit, and the Office of the Tulare County District Attorney's Agricultural Crime Technology Information and Operations Network (ACTION). ACTION is comprised of agencies from the eight counties in the San Joaquin Valley, including local District Attorney's Offices, Sheriffs Offices, Agricultural Crime Units and Agricultural Commissioners.

City of Visalia

The City of Visalia Police Department provides law enforcement services within the City limits. The Police Department has two stations: District 1 located at 204 North West 3rd Street, and District 2 located at 4100 South County Center Drive. Department headquarters are located at 303 South Johnson Street. Calls for service are dispatched by the Dispatch Division, which is staffed with 18 full-time Public Safety Dispatchers and four hourly Call Takers. The Dispatch Center answers and processes seven emergency (911) lines, 15 non-emergency lines and several radio frequencies, and is staffed 24 hours a day, 365 days a year (City of Visalia Police Department, 2008). The City of Visalia Police Department provides police protection services on a 24-hour per day basis with a minimum of six sworn officers on duty (Badge #381, 2008). The City of Visalia Police Department patrols residential and business areas, responding to, and investigating reports of crime. Additionally, the Department conducts community-oriented policing including running a coed youth and young adult vocational and leadership development program, and adhering to its Community Oriented Policing and Problem Solving (COPPS) policy (City of Visalia Police Department, 2008).

City of Farmersville

The City of Farmersville Police Department provides law enforcement services within the City limits. The Police Department has one station located at 909 West Visalia Road. Calls for service are dispatched by the City of Farmersville Police Department between the hours of 8:00 a.m. and 4:30 p.m. Evening calls are dispatched by the Tulare County Sheriff's Department. The City of Farmersville Police Department provides police protection services 24 hours per day with a minimum of two sworn officers on duty, one sergeant, and two detectives. The City of Farmersville Police Department patrols residential and business areas, responding to, and investigating reports of crime. Additionally, the Department conducts community-oriented policing including providing proactive patrols, and conducting informational seminars and education programs (Rosales, 2008).

Schools

There are nine school districts and one community college within the vicinity of the Proposed Project. Table 4.12-1 provides a list of school districts, the area each district serves, grades served, and each district's average daily attendance.

**TABLE 4.12-1
STUDY AREA SCHOOL DISTRICTS**

District	Area Served	Grades Served	Average Daily Attendance
College of the Sequoias	Visalia	13-14	11,158 (full time equivalent students)
Cutler-Orosi Unified School District	Cutler, Orosi, Badger, Yettem	Kindergarten-12	3,784
Exeter Union Elementary School District	Exeter	PreKindergarten-8	2,000
Exeter Union High School District	Exeter	9-12	1,139
Farmersville Unified School District	Farmersville	9-12	2,297
Sequoia Union Elementary School District	Lemon Cove	Kindergarten-8	352
Stone Corral Elementary School District	Visalia	Kindergarten-8	130
Visalia Unified School District	Visalia, Goshen, Ivanhoe	PreKindergarten-12/ Adult	26,368
Woodlake Union Elementary School District	Woodlake	PreKindergarten-8	1,650
Woodlake Union High School District	Woodlake	9-12	750

SOURCE: Tulare County Office of Education, 2008.

Three schools are located within one quarter mile of the Proposed Project. Kaweah High School, Community Day School, Independent Study, and Adult Education School is located at 21215 Avenue 300 in the City of Exeter, approximately 600 feet from the Proposed Project. Union Elementary School is located at 28050 Road 148 in the City of Visalia, approximately 800 feet from the Proposed Project. Sequoia Union Elementary School is located at 23958 Avenue 324 in the community of Lemon Cove, approximately 1,160 feet from the Proposed Project (SCE, 2008).

Other Public Facilities

Daycare Facilities

There are no registered or non-registered daycare/childcare facilities located within one quarter mile of the Proposed Project or alternative alignments.

Library

Exeter Branch County Library, at 230 East Chestnut in the City of Exeter, is located approximately two miles south of the Proposed Project.

Medical Facilities

Visalia Nursing and Rehab Center, at 1925 East Houston Avenue in the City of Visalia, is located approximately 1.5 miles west of the Proposed Project. Kaweah Delta Health Care District Dialysis Center, at 316 South Dunworth Street in the City of Visalia, is located approximately one mile west of the Proposed Project. Memorial Hospital, at 215 Crespi Avenue in the City of Exeter, is located approximately two miles south of the Proposed Project.

Regulatory Context

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Safety Element of the Tulare County General Plan contains the following goals and policies that would be applicable to the Proposed Project and alternatives:

Goal 3.A: To reduce the loss of life, and damage to or loss of personal property due to crime, fire, earthquakes, flooding and other disasters, natural and man-made.

Policy 3.J.13: Require that proposed developments or uses in wildland areas be subject to review by local fire agencies responsible for protecting development after they are constructed. After a thorough study of the possible hazards and risks that would be associated with completion and the use of the development, the local fire agencies should require that fire prevention and possible suppressions standards be met.

(Tulare County, 2001).

Cal Fire Tulare Fire Management Plan (Proposed Project and Alternatives 2, 3 and 6)

The Cal Fire Tulare Fire Management Plan does not reference transmission lines or utility lines, and it does not contain specific goals or policies applicable to the Proposed Project and alternatives (Cal Fire, 2005).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia General Plan does not include any goals or policies applicable to the Proposed Project and alternatives (City of Visalia, 1975).

City of Farmersville General Plan (Proposed Project)

The City of Farmersville General Plan does not include any goals or policies applicable to the Proposed Project and alternatives (City of Farmersville, 2002).

4.12.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, a project impact would be considered significant if it would:

- a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
 - i. Fire protection;
 - ii. Police protection;
 - iii. Schools;
 - iv. Other public facilities.

4.12.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on public services.

4.12.4 Impacts and Mitigation Measures

Approach to Analysis

This impact analysis considers the potential public service impacts associated with the construction, operation, and maintenance of Proposed Project.

The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades. All substation work would occur on previously disturbed, un-vegetated areas within the existing fence line of the substations. Since project activities at the substations would be limited in duration, require a small construction crew and not require the need for additional permanent staff, they would not result in the need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, and performance objectives. Consequently, there would be no impacts to public services due to the activities proposed at the substation locations.

The Proposed Project could result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services, as described below.

a.i) Fire Protection.

Fire protection services for the Proposed Project would be provided by Cal Fire, the Tulare County Fire Department, the Visalia Fire Department, and the Farmersville Fire Department as well as other fire protection districts in the area that participate in automatic aid agreements. The Proposed Project would not introduce any new uses to the project area that would generate long-

term changes to fire protection services. Once constructed, the transmission line would require routine maintenance trips, inspection, and vegetation management activities to be provided by SCE. Maintenance activities would increase slightly above existing levels that are employed to maintain the existing transmission lines to include 17.4 miles of transmission line located in new right-of-way (ROW).

Increases in long-term demand for fire protection services are typically associated with substantial increases in population. Construction activities in the project area are expected to last approximately nine to 12 months, beginning in October 2011 and concluding in late 2012. During peak construction activities, approximately 50 crew members per day would be required to construct the Proposed Project. It is expected that at least 30 to 40 of the craft personnel would be from the contractor's pool of experienced personnel, with the remaining construction personnel coming from local sources (SCE, 2008). The temporary nature of the construction period and workforce would not result in a substantial population increase that would increase the long-term demand for fire protection services. Therefore, the Proposed Project would not result in a substantial increased long-term demand for fire protection services (No Impact).

Construction of the Proposed Project could affect the temporary demand for fire protection and emergency response services, as discussed below.

Impact 4.12-1: Project construction activities could temporarily increase the demand for fire protection services. *Less than significant with mitigation (Class II)*

Proposed Project construction would include construction of 18.5 miles of new transmission line, 1.1 miles of which would be constructed in existing SCE ROW. Proposed Project construction could involve emergency situations related to worker injury that would require emergency response services. Additionally, because a majority of the Proposed Project traverses largely undeveloped areas, emergency situations could result that would require fire suppression services and emergency response. Construction activities would be temporary, lasting approximately nine to 12 months. Implementation of the Mitigation Measures 4.12-1a and b (see below) would be required to reduce impacts to a less than significant level.

Mitigation Measure 4.12-1a: SCE shall implement Mitigation Measure 4.7-1c (see Section 4.7, *Hazards and Hazardous Materials*) which requires preparation of a Health and Safety Plan. In addition, this Plan shall address emergency medical services in the case of an emergency. The Plan shall list procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. SCE shall submit the Plan to the CPUC for review prior to construction of the Proposed Project. Additionally, the Plan shall be distributed to all construction crew members involved in the project prior to construction and operation of the project.

Mitigation Measure 4.12-1b: Implement Mitigation Measure 4.7-8.

Significance after Mitigation: Less than significant.

Impact 4.12-2: Project construction activities in proximity to public roadways could potentially affect vehicle access and fire department response times. *Less than significant with mitigation* (Class II)

Construction related to the Proposed Project would generally parallel local, county and State roads. Several roadways, including State Route 198 (SR 198), Farmersville Boulevard, Anderson Road, and State Route 65/245 (SR 65/245), would be crossed by the Proposed Project and would likely need to be temporarily closed during transmission line stringing activities (see Section 4.14, *Traffic and Transportation*, for further discussion on impacts related to road closures and potential impacts to public roadways).

Mitigation Measure 4.12-2: SCE shall coordinate with the Tulare County and the cities of Visalia and Farmersville emergency service providers prior to construction to ensure that construction activities and associated lane closures would not significantly affect emergency response vehicles. SCE shall submit verification of its consultation with emergency service providers to the CPUC.

Significance after Mitigation: Less than Significant.

a.ii) Police Protection.

Police protection services in the project area would be provided by the Tulare County Sheriff's Department, the Visalia Police Department, and the Farmersville Police Department. The Proposed Project would not introduce any new uses to the project area that would generate long-term changes to police protection services. Once constructed, the transmission line would require monitoring in the form of police response to potential trespassing. Operational activities would increase above existing levels that are employed to maintain the existing transmission line to include 17.4 miles of transmission line located in new ROW. However, as stated in Chapter 2, *Project Description*, gates would be installed where required at fenced property lines to restrict general and recreational vehicular access, thereby reducing opportunities for trespassing, and the need for police response.

Potential police protection service effects would primarily be confined to construction of the Proposed Project. Further, increases in the demand for police protection services are typically associated with substantial increases in population. As mentioned previously, during peak activities, a 50 person crew with at least 30 to 40 craft personnel from the contractor's pool would be required to construct the Proposed Project. Construction activities would be temporary, lasting approximately nine to 12 months. This would not result in a substantial population increase that would increase the long-term demand for police protection services. Therefore, the Proposed Project would not require new or physically altered police protection facilities (No Impact).

Construction of the Proposed Project could temporarily affect police protection services, as discussed below.

Impact 4.12-3: Project construction activities could temporarily increase the demand for police services. *Less than significant with mitigation (Class II)*

Proposed Project construction may require police services due to possible theft of construction equipment and/or vandalism that might occur during the construction period. Additionally, Proposed Project construction may, at times, require temporary partial closure of adjacent roadways, requiring traffic control measures, or safety measures that would typically be coordinated with local police. Several private and public roadways, including SR 198, Farmersville Boulevard, Anderson Road, and SR 65/245, that would be crossed by the Proposed Project would likely need to be temporarily closed during transmission line stringing activities (see Section 4.14, *Traffic and Transportation*, for further discussion on impacts related to road closures and potential impacts to public roadways). Mitigation Measures 4.12-3a, b, and c would be required to reduce potential impacts to less than significant.

Mitigation Measure 4.12-3a: SCE shall implement standard precautionary measures, such as securing equipment when left unattended, to minimize theft and vandalism.

Mitigation Measure 4.12-3b: SCE shall provide traffic control, if necessary, in coordination with the appropriate police agency. For the crossing of any private or public roadways, safety measures such as barriers, flagmen, or other traffic control shall be used for public protection during wire installation.

Mitigation Measure 4.12-3c: SCE shall implement public safety measures, including the covering and securing of all open holes once activity at that location is stopped (after hours), and the placement of safety structures adjacent to roadways during overhead wire installation activity to protect vehicles and pedestrians.

Significance after Mitigation: Less than Significant.

a.iii) Schools.

Impact 4.12-4: Increased school enrollments attributable to the Proposed Project could exceed available school capacities. *Less than significant (Class III)*

The Proposed Project would not result in substantial adverse impacts to school facilities in the project area. The construction crew for the Proposed Project is estimated to be up to 50 crew members, including SCE and contracted construction personnel. It is expected that at least 30 to 40 of the construction crew members would be from the contractor's pool of experienced personnel, and the remaining construction personnel would come from local sources (SCE, 2008). The Proposed Project would not result in a significant increase of local population or housing, which is typically associated with increased demand for public school services. Therefore, the Proposed Project would not result in a substantial increase in demand for school facilities and impacts to public school services would be less than significant.

Mitigation: None required.

a.iv) Other Public Facilities.

The Proposed Project would not result in substantial adverse impacts to other public facilities, such as public libraries or other civic uses, as the Proposed Project would not result in a significant increase of local population or housing, which is typically associated with increased demand for public facilities. For a discussion of impacts related to road closures and potential impacts to public roadways, see Section 4.14, *Transportation and Traffic*. No other public facilities would be adversely impacted by the construction or operation of the Proposed Project (No Impact).

4.12.5 Cumulative Impacts

The geographic scope of this impact is the service area of affected public services, generally limited to within the northwestern portion of Tulare County and the cities of Visalia and Farmersville. As discussed above, the Proposed Project would not result in significant effects on the ability of service providers to provide adequate police services, fire protection and emergency medical services, and public school facilities to the project area. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several large development projects planned in the vicinity of the Proposed Project that may impact public services. These projects include numerous new housing subdivisions and the Yokohl Ranch Project – a master planned community of 10,000 residential units, 550,000 square feet of mixed use space, and infrastructure including roads and utilities. It is likely that this cumulative development would require expansion of existing, or development of new, public service infrastructure to support the planned population growth. If this growth were to occur prior to improvements in public service infrastructure, then there could be significant adverse effects on fire protection and emergency medical services, police protection, schools and other public facilities. However, the Proposed Project's impacts to public services would generally be limited to the construction period of nine to 12 months, after which the Proposed Project's demand on public services would be inconsequential. Additionally, Mitigation Measures 4.12-1a, 1b, 2, 3a, 3b, and 3c would ensure that the Proposed Project's temporary public service impacts during construction would be negligible. Therefore, the effect of the Proposed Project on public services, in combination with other past, present and reasonably foreseeable projects, would not be cumulatively considerable (Class II).

4.12.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented. Demand for electricity in the Electrical Needs Area would not be adequately met, and the unequal distribution of load would continue to result in overloads on the 220 kV lines serving Rector Substation from the Big Creek Hydroelectric Project. This condition would continue to jeopardize SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area, creating the potential for increased incidence of brown-outs and black-outs in the future. Such disruptions to electric service could result in indirect impacts to the provision of public services. For example, disruption to traffic signals could result in additional traffic that would slow down response times of emergency service providers. Therefore, the No Project Alternative could potentially result in adverse impacts to public services. Depending on the extent, frequency, and duration of these service interruptions, the effects could be cumulatively considerable resulting in significant impacts that could not be mitigated (Class I).

Alternative 2

As with the Proposed Project, implementation of Alternative 2 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation and maintenance activities associated with Alternative 2 would be the same as under the Proposed Project. Compared to the Proposed Project Alternative 2 would require the removal of an additional 158 existing towers and the construction of an additional 44 towers and poles; as such, total project construction of Alternative 2 is estimated to be approximately 20 months, which is eight months longer than the Proposed Project. However, the additional time and/or crew necessary for construction of Alternative 2 would not induce substantial population growth directly or indirectly; therefore, the demand for fire protection and emergency medical services, police protection, schools and other public facilities would not be substantially different than under the Proposed Project. Because Alternative 2 would not pass through the City of Farmersville, impacts on public services in that community would be less than for the Proposed Project. Implementation of Mitigation Measures 4.12-1a, 1b, 2, 3a, 3b, and 3c would be applicable to Alternative 2 and would ensure that potential impacts to public services would be reduced to less than significant (Class II).

Alternative 3

As with the Proposed Project, implementation of Alternative 3 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation and maintenance activities associated with Alternative 3 would be the same as under the Proposed Project. Compared to the Proposed Project, Alternative 3 would require the removal of an

additional 216 existing towers and the construction of an additional 79 towers and poles. Consequently, total project construction of Alternative 3 is estimated to be approximately 24 months, which is 12 months longer than the Proposed Project. However, the additional time and/or crew necessary for construction of Alternative 3 would not induce substantial population growth directly or indirectly; therefore, the demand for fire protection and emergency medical services, police protection, schools and other public facilities would be the same as under the Proposed Project. Because Alternative 3 would not pass through the City of Farmersville, impacts on public services in that community would be less than for the Proposed Project. Implementation of Mitigation Measures 4.12-1a, 1b, 2, 3a, 3b, and 3c would be applicable to Alternative 3 and would ensure that potential impacts to public services would be reduced to less than significant (Class II).

Alternative 6

As with the Proposed Project, implementation of Alternative 6 would increase reliability and accommodate existing and planned electrical load growth, rather than induce growth. Operation and maintenance activities associated with Alternative 6 would be the same as under the Proposed Project. Compared to the Proposed Project, Alternative 6 would require the removal of additional existing towers and poles, though it would require the construction of fewer towers. Total project construction of Alternative 6 is estimated to be approximately 16 months, which is four months longer than the Proposed Project. However, the additional time and/or crew necessary for construction of Alternative 6 would not induce substantial population growth directly or indirectly; therefore, the demand for fire protection and emergency medical services, police protection, schools and other public facilities would be the same as under the Proposed Project. Because Alternative 6 would not pass through the City of Farmersville, impacts on public services in that community would be less than for the Proposed Project. Implementation of Mitigation Measures 4.12-1a, 1b, 2, 3a, 3b, and 3c would be applicable to Alternative 6 and would ensure that potential impacts to public services would be reduced to less than significant (Class II).

References – Public Services

Badge #381, 2008. City of Visalia Police Department. Phone conversation August 8, 2008.

California Department of Forestry and Fire Services (Cal Fire), 2005. Cal Fire Tulare Unit Fire Management Plan 2005. July, 2005. Webpage available at:
<http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf135.pdf>, accessed September 16, 2008.

City of Farmersville, 2002. *Farmersville General Plan*, November, 2002.

City of Visalia, 1975. *Safety Element, Visalia General Plan*, adopted 1975.

City of Visalia Fire Department, 2008. Webpage available at:
http://www.ci.visalia.ca.us/depts/fire_department/department_information/default.asp,
accessed August 1, 2008.

City of Visalia Police Department, 2008. Webpage available at:
http://www.ci.visalia.ca.us/depts/police_department/default.asp, accessed August 1, 2008.

Crivello, John, 2008. Fire Chief, Farmersville Fire Department. Phone conversation August 19, 2008.

Douglas, Chris Galvez, 2008. Sergeant, Public Information Officer, Personnel & Training Division, Tulare County Sheriff's Department. Written communication September 16, 2008.

Granillo, 2008. Fire Captain, California Department of Forestry and Fire Protection, Tulare Unit. Phone conversation November 4, 2008.

Rosales, Roland, 2008. Technical Services Clerk, City of Farmersville Police Department. Phone conversation on August 1, 2008.

Southern California Edison (SCE), 2008. *Proponent's Environmental Assessment, San Joaquin Cross Valley Loop Project*, May 30, 2008.

Tulare County, 2001. *County of Tulare, General Plan Policy Summary*. December, 2001.

Tulare County Fire Department (TCFD), 2008. Website available at:
<http://www.co.tulare.ca.us/government/fire/default.asp>, accessed August 1, 2008.

Tulare County Office of Education, 2008. Website available at:
<http://www.tcoe.k12.ca.us/Districts/index.shtm>, accessed August 1, 2008.

Tulare County Sheriff's Department, 2008. Website available at:
http://www.co.tulare.ca.us/government/sheriff/divisions_and_units/default.asp, accessed August 1, 2008.

4.13 Recreation

This section presents the environmental setting and impact analysis for parks, open space, and recreational resources for the Proposed Project and the surrounding project area. The purpose of this section is to assess the impacts of the Proposed Project and alternatives on recreational services. Cumulative impacts are determined with consideration of projected development in the study area.

4.13.1 Setting

Existing Setting

Existing recreational and open space resources in the study area are discussed by jurisdiction below.

National Parks

In Tulare County, there are no national parks in the study area. However, the northeastern portion of Tulare County is home to parts of the Sequoia and Kings Canyon National Parks.

In Fresno County, the Big Creek 3 Substation is located in the Sierra National Forest, at the eastern tip of Redinger Lake. Constructed by Southern California Edison (SCE) in 1951, Redinger Lake is located on the South Fork of the San Joaquin River above Kerckhoff Reservoir, and is part of the Big Creek Hydroelectric Project. Surrounded by oak and shrub covered foothills, the lake provides year-round fishing for German brown and eastern brook trout, small mouth bass, bluegill and catfish. The lake has a public boat launching ramp and offers opportunities for recreational activities that include water skiing, jet skiing, canoeing, kayaking, and camping (USFS, 2009).

State Parks

There are no state parks in the study area. The only state park in Tulare County is Colonel Allensworth State Historic Park in Allensworth, located approximately 30 miles southwest of the City of Visalia (California State Parks, 2008).

Tulare County Parks

Tulare County contains over 460 acres of a wide range of open space, parks and recreational areas, which fall under the jurisdiction of the County Resource Management Agency (Tulare County, 2008). Open space and recreation areas within the County offer residents and visitors recreational opportunities including hiking, picnicking, fishing, and sports facilities. In addition to nature reserves, campgrounds, and parks, there are several rivers and two lakes that provide recreational opportunity within the County – Lake Kaweah and Lake Success (Tulare County, 2008).

Located approximately one-half mile north of the Proposed Project, Kaweah Oaks Preserve in the City of Exeter is a 324-acre property that contains the largest protected example of Great Valley oak riparian forest within the Kaweah River Delta. Furthermore, approximately half of the Preserve is an alkali meadow habitat, an equally rare habitat where bunchgrasses and other alkali-loving native plants thrive (see Section 4.4, *Biological Resources*, for further information) (City of Farmersville, 2002).

Cutler Park is located approximately two miles north of the Proposed Project and approximately one-quarter mile east of Alternatives 2, 3 and 6 at 15520 Ivanhoe Drive near the community of Ivanhoe. Acquired in 1919, it is a 50-acre County park along the St. Johns River. The Park has picnic tables, a playground and large valley oaks. Attendance is generally highest during the summer when there is flow in the river, as locals use the park for swimming, inner-tubing and wading. Local middle schools, high schools, and colleges use the park for cross country meets, setting up a track through the park. While City of Visalia designated waterways and trails currently do not go through Cutler Park, the City has plans for such trails to traverse the park in the future (Pilegard, 2008).

Fresno County Parks

Fresno County contains a variety of regional parks and landscaped areas. Regional recreational facilities in the County include thirteen parks, three fishing access areas and a boat-launching ramp. Recreational activities offered in these areas include fishing, hiking, picnicking, jogging, bird-watching, sports, barbecues, and overnight camping. The Big Creek 3 Substation is the only portion of the Proposed Project and alternatives located in Fresno County. It is approximately 20 miles (by car) from the closest designated county recreational facility, the Shaver Lake boat launching ramp (Fresno County, 2009).

Local Parks

City of Visalia

The City of Visalia Parks and Recreation Department is located at 345 North Jacob Street in the City of Visalia. The City is home to 35 parks, groves, and gardens, as well as numerous community centers. The City's parks provide recreation opportunities including play equipment for toddlers and older children, picnic facilities and places to host parties, as well as fields for baseball, soccer, and other sports. Visalia also has an extensive system of waterways, trails, and bike paths that traverse the City (City of Visalia, 2008). The City has identified a future community park site that would be located adjacent to Alternatives 2, 3, and 6. The park would be located east of the existing SCE ROW, just north of State Route 198 (SR 198), which is outside the City limits but within the City's urban boundary. The park would be 100 acres, with a planned build-out date of 2012 (Shepard, 2008).

City of Farmersville

The City of Farmersville Department of Public Works manages local parks, and is located at 873 South Farmersville Boulevard in the City of Farmersville. The City of Farmersville has six developed park sites comprising approximately 25.5 acres, including: Jennings Park (2.1 acres),

Memorial Park (4.2 acres), Roy's Park (4.5 acres), Ash Street Park (2.2 acres), Riverbank Park (one-half acre), Liberty Park (six acres), and Armstrong Park (four acres) (City of Farmersville, 2002; Martinez, 2008). Existing parks feature amenities such as: grass fields, baseball diamonds, handball courts, picnic tables, barbecues, and playgrounds. The City has a 26-acre planned park-site located next to Memorial Park, with plans to build a sports complex with baseball, soccer, jogging, and other amenities in the next year or two (Martinez, 2008). The City has an additional four to five acres of land reserved for small parks in the next few years. The City of Farmersville does not have a system of bike paths, and as of 2008 had no plans for such a system (Martinez, 2008).

Regulatory Setting

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The protection and preservation of recreation and open space areas from urbanization is an important issue for Tulare County. The communities of Lemon Cove, Three Rivers, and Success have been designated by the Tulare County General Plan Policy Summary as special study areas of considerable potential for the location of recreation-oriented residential and commercial development (Tulare County, 2001).

The Environmental Resource Management Element of the Tulare County General Plan contains the following goals that would be applicable to the Proposed Project and alternatives:

Goal 6.A: To preserve and enhance the quality of life of present and future generations of citizens by preventing a degradation of the natural environment, by taking steps to offset and alleviate the effects of that degradation which already has occurred, and by seeking an optimum balance between the economic and social benefits to be derived from the County's natural resources.

Goal 6.A: To preserve for subsequent generations the greatest possible range and freedom of choice in the use and enjoyment of the County's natural resources— to maintain as many options for the future as reasonably may be possible, consistent with the need for action in the short-term.

(Tulare County, 2001).

Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Fresno County General Plan contains the following policy that would be applicable to the Proposed Project and alternatives:

Policy OS-H.1: The County shall promote the continued and expanded use of national forest, national park, and other recreational areas to meet the recreational needs of County residents.

(Fresno County, 2000).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The Conservation, Open Space, Recreation and Parks Element of the City of Visalia General Plan includes the following goal and policy that would be applicable to the Proposed Project and alternatives:

Goal 3, Objective C: Provide park sites which respond to the needs of the City's diverse population, including waterway systems, trails and bikeways for pedestrians, joggers and bicyclists, as well as non-traditional types of recreation and open space such as skateboarding, community gardens, and habitat protection.

Policy 3.4.2: Develop a community-wide trail and bikeway loop along selected planning area waterways and roadways to link Cutler Park and Plaza Park. Develop the St. John's River, Mill Creek, Persian Ditch, and Cameron Creek as scenic trail, bike path and recreation open space corridors through the community.

(City of Visalia, 1989).

City of Visalia Waterways and Trails Master Plan (Proposed Project and Alternatives 2, 3 and 6)

The City of Visalia Waterways and Trails Master Plan is a map that includes existing and future parks, bike paths and trails, as well as potential rest and staging areas. As discussed in the Setting, Cutler Park (a County owned and operated park) would be located in the vicinity of the Proposed Project and alternatives. No other existing parks or bike trails identified on the Master Plan are located in the study area. A future (planned) Class I bike trail, designated by the Master Plan to run adjacent to the existing SCE power-line easement from Cameron Creek to just south of Cutler Park, is located in the study area for the Proposed Project and alternatives. However, it is not projected to be in the active planning stages until after 2013, well after the projected completion of Proposed Project construction (Shepard, 2008). The Master Plan also identifies a future community park site, located just north of SR 198, that would be located adjacent to Alternatives 2, 3, and 6 (discussed above in the Setting) (City of Visalia, 2004).

City of Farmersville General Plan (Proposed Project)

The Conservation, Open Space, Parks and Recreation Element of the City of Farmersville General Plan includes the following goal and objective that would be applicable to the Proposed Project:

Issue One, Objective 1: Maintain compliance with adopted City park standards now and as the City grows.

Issue Three, Goal 1: Create and preserve open space in the Farmersville area to meet the needs of the community now, and in the future.

(City of Farmersville, 2002).

4.13.2 Significance Criteria

The *CEQA Guidelines* Appendix G provides guidance for assessing the significance of potential environmental impacts. Relative to recreation and open space, a project will normally have a significant effect on the environment if it would:

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated; or
- b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

4.13.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on parks and recreation.

4.13.4 Impacts and Mitigation Measures

Approach to Analysis

This impact analysis considers the potential adverse impacts on recreational services associated with the construction, operation, and maintenance of the Proposed Project.

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated.***

Impact 4.13-1: The Proposed Project could increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. *Less than significant (Class III)*

Increases in demand for recreational facilities are typically associated with substantial increases in population. The Proposed Project would not contain a residential component that would result in an increased use of existing recreational facilities. As further discussed in Section 4.11, *Population and Housing*, the number of construction workers that would be required to construct the Proposed Project, at its peak, would be approximately 50 crew members per day. This includes the seven-person crews anticipated for the proposed modifications at the Springville, Vestal, and Big Creek 3 Substations. It is expected that at least 30 to 40 of the craft personnel would be from the contractor's pool of experienced personnel, with the remaining construction personnel coming from local sources (SCE, 2008). The Proposed Project construction activities would be temporary, lasting approximately nine to 12 months, and would not result in additional staffing at the substations or along the alignment. The Proposed Project therefore would not result in a substantial increased demand for recreational facilities, and implementation of the Proposed Project is not expected to result in any substantial physical deterioration of existing facilities. Impacts would be less than significant.

Mitigation: None required.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

The Proposed Project does not include any plans for the addition of any recreational facilities nor would it require the construction or expansion of recreational facilities. Therefore, the Proposed Project would not result in any adverse physical effects on the environment from construction or expansion of additional recreational facilities (No Impact).

4.13.5 Cumulative Impacts

The geographic scope of this impact is the regional recreational facilities in the project area, generally located within western Tulare County and the cities of Visalia and Farmersville.

As described above, implementation of the Proposed Project would have no impact on the environment from construction or expansion of additional recreational facilities, and so would not have any contribution to cumulative impacts there from.

With regard to increased use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated, impacts from the Proposed Project would occur only during the nine to 12-month construction period and even then would be inconsequential. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several development projects in Tulare County that could increase the demand on existing and/or result in the need for new recreational facilities within the project vicinity by significantly increasing the population in the project area. These projects include the Yokohl Ranch Project as well as numerous subdivisions and planned developments approved for construction. However, because the Proposed Project would have no incremental demand on existing recreational facilities once construction is complete, it would not contribute to the cumulative demand from the other planned development projects.

Therefore, the Proposed Project would not contribute to cumulative long-term impacts on recreation (Class III).

4.13.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no recreational impacts would occur (No Impact).

Alternative 2

Like the Proposed Project, Alternative 2 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Compared to the Proposed Project, Alternative 2 would require the removal of an additional 158 existing towers and the construction of an additional 44 towers and poles. As such, total project construction of Alternative 2 is estimated to be approximately 20 months, which is eight months longer than the Proposed Project. However, the additional time necessary for construction of Alternative 2 would not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 2 would be less than significant (Class III).

Alternative 3

Like the Proposed Project, Alternative 3 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Alternative 3 would require the removal of an additional 216 existing towers and the construction of an additional 79 towers and poles, compared to the Proposed Project. Consequently, total project construction of Alternative 3 is estimated to be approximately 24 months, which is 12 months longer than the Proposed Project. However, the additional time necessary for construction of Alternative 3 would not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 3 would be less than significant (Class III).

Alternative 6

Like the Proposed Project, Alternative 6 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Compared to the Proposed Project, it is estimated that Alternative 6 would require the removal of more existing towers and the construction of more poles, though it would require the construction of fewer towers. Total project construction of Alternative 6 is estimated to be approximately 16 months, which is four

months longer than the Proposed Project. However, the additional time necessary for construction of Alternative 6 would not result in substantial physical deterioration of recreational facilities. Therefore, impacts to recreational resources resulting from implementation of Alternative 6 would be less than significant (Class III).

References – Recreation

- California State Parks, 2008. Find a Park Search. <http://www.parks.ca.gov/parkindex/results.asp>, accessed November 21, 2008.
- City of Farmersville, 2002. City of Farmersville General Plan. Adopted November 6, 2002.
- City of Visalia, 1989. Conservation, Open Space, Recreation, and Parks Element. Visalia General Plan. Adopted June 1989.
- City of Visalia, 2004. Visalia Waterways and Trails Master Plan, Trail Linkages Plan. December 10, 2004. <http://www.ci.visalia.ca.us/civica/filebank/blobload.asp?BlobID=4913#page>, accessed December 29, 2008.
- City of Visalia, 2008. Parks and Recreation Department. http://www.ci.visalia.ca.us/depts/parks_n_recreation/parks_n_facilities/parkinfo/default.asp, accessed November 21, 2008.
- Fresno County, 2000. Open Space and Conservation Element, Fresno County General Plan. Published October, 2000.
- Fresno County, 2009. Public Works and Planning, Parks and Recreation Areas. Available at: <http://www.co.fresno.ca.us/departmentpage.aspx?id=6026>. Accessed April 15, 2009.
- Martinez, Eliseo, 2008. Director of Public Works, City of Farmersville. Phone conversation September 24, 2008.
- Pilegard, 2008. Manager, Tulare County Resource Management Agency. Phone Conversation. December 29, 2008.
- Southern California Edison Company (SCE) 2008. Proponent's Environmental Assessment San Joaquin Cross Valley Loop Project. Filed May 30, 2008.
- Shepard, Paul, 2008. Management Analyst, City of Farmersville Department of Parks and Recreation. Phone conversation November 21, 2008 and December 30, 2008.
- Tulare County, 2001. County of Tulare—General Plan Policy Summary. December 2001.
- Tulare County, 2008. Website available at: <http://www.co.tulare.ca.us/government/rma/parks/parklocation.asp>, accessed September 17, 2008.

United States Forest Service (USFS), 2009. Sierra National Forest—Recreation, Lakes and Reservoirs: Recreation—Redinger Lake. Available at: <http://www.fs.fed.us/r5/sierra/recreation/lakes/redingerlake/index.shtml>. Accessed April 16, 2009.

4.14 Transportation and Traffic

This section presents the environmental setting and impact analysis for transportation facilities associated with the Proposed Project and the alternatives. The purpose of this section is to assess the impacts of the Proposed Project and alternatives on traffic operations and other transportation modes in the surrounding area.

4.14.1 Setting

The Proposed Project is located in north western Tulare County, California near the cities of Visalia, Farmersville, and Exeter. With the exception of the City of Visalia the study area is primarily rural, low-density and agricultural. The dominant mode of transportation in this region is the private automobile. The Proposed Project and alternatives would affect the roadway network located in north western Tulare County and the southeast portion of the City of Visalia and the City of Farmersville. The transportation system in the area is composed of an interconnected network of State, County and city roads; local transit systems; and a rail right-of-way (ROW). The transportation system in the study area is described below.

Roadway Network

Several State and local roadways provide regional and local access to the study area, each of which would be used to transport construction materials, equipment, and workers to and throughout the study area. The project corridors and surrounding roadway network are illustrated in Figure 2-1 (Chapter 2, *Project Description*). Descriptions of the regional and local roadway network in the study area are provided below.

Regional Roadways

Regional access to the study area is provided by State Route 99 (SR 99), State Route 198 (SR 198), State Route 65 (SR 65), State Route 201 (SR 201), State Route 216 (SR 216) and State Route 245 (SR 245). Below are summary descriptions of each of these regional roadways.

SR 99 is a north-south State highway that extends almost the entire length of the Central Valley. From its south end at Interstate 5 (I-5) near Wheeler Ridge to its north end at State Route 36 near Red Bluff, SR 99 is an alternate to I-5 through the more populated eastern portions of the valley. SR 99 passes through or near the following cities: Bakersfield, Visalia, Fresno, Madera, Merced, Modesto, Stockton, Sacramento, Yuba City, and Chico. SR 99 in the vicinity of the study area is a controlled access freeway. SR 99 would not be crossed by the Proposed Project or the alternatives. Traffic volumes along SR 99 in the area of its junction with SR 198 have an annual average daily traffic (ADT) level of 55,000 vehicles per day (Caltrans, 2009).

SR 198 is an east-west State highway that connects the California Central Coast to the mid-Central Valley at Visalia. The road begins at U.S. Route 101 south of King City and has a junction with I-5 in Fresno County. From I-5 to just east of Visalia, SR 198 is a controlled access freeway with four lanes. It has an interchange with SR 99 in Visalia and continues east of Visalia

as a two-lane highway where it ends at Sequoia National Park. The Proposed Project would cross SR 198 where it is a two-lane highway; the alternatives would cross SR 198 where it is a four-lane controlled access freeway. Traffic volumes along SR 198 in the study area (east of Lovers Lane) have an annual ADT level of 30,000 vehicles per day (Caltrans, 2009).

SR 65 is a north-south State highway composed of two segments connecting Bakersfield to Exeter (south of the study area) and Roseville to Olivehurst. A large section of SR 65 that is planned to link the two segments has not yet been constructed. The Proposed Project would cross SR 65. Traffic volumes along SR 65 in the study area (south of SR 198) have an annual ADT level of 10,000 vehicles per day (Caltrans, 2009).

SR 201 is an east-west State highway that connects SR 99 in Kingsburg, Fresno County with SR 245 (Millwood Drive) in the study area. Alternative 3 would cross SR 201. Traffic volumes along SR 201 in the study area (junction at SR 245) have an annual ADT level of 1,150 vehicles per day (Caltrans, 2009).

SR 216 is an east-west two-lane State highway which stretches from Visalia to Woodlake in Tulare County. Alternatives 2, 3, and 6 would cross SR 216. Traffic volumes along SR 216 in the study area (east of Lovers Lane) have an annual ADT level of 11,000 vehicles per day (Caltrans, 2009).

SR 245 is a north-south two-lane State highway that runs from near Exeter to near Kings Canyon National Park, connecting SR 198 in Tulare County to State Route 180 in Fresno County. It runs through the City of Woodlake and the small unincorporated communities of Elderwood, Badger, and Pinehurst. Alternatives 2 and 6 would cross SR 245, and a short segment of Alternative 6 would parallel the west side of the road between Avenue 360 and Avenue 364. Traffic volumes along SR 245 in the study area (at the junction of SR 198) have an annual ADT level of 3,300 vehicles per day (Caltrans, 2009).

Local Roadways

The local roadways that border, cross, or may be used to access the study area are described below. Some of the roads would be affected during line stringing activities over the roads, while others would be used for access throughout the construction phase of the project. Many of the local roads experience relatively low traffic volumes. Below are summary descriptions of the local roadways that may be affected by the Proposed Project and/or alternatives. The descriptions include annual ADT levels, where recent data (i.e., 2006 and later) are available.

Proposed Project

The Proposed Project would cross a number of public and private roads. North of the Rector Substation, the Proposed Project would cross West Walnut Avenue, a two-lane County roadway with no shoulders. South of and parallel to SR 198, the Proposed Project would cross public roads between 5th Avenue and Road 212. Some of the public roadways crossed in this segment include: 6th Avenue, a two-lane County roadway with no shoulders; Farmersville Boulevard, a two lane County road with paved shoulders that had an estimated 2006 annual ADT level of 7,950 (County

of Tulare, 2007); N. Anderson Road, a two-lane County roadway with no shoulders; and N. Spruce Road a two-lane County roadway with no shoulders that had an estimated 2006 annual ADT level of 1,090 (County of Tulare, 2007). The Proposed Project would also cross Avenue 300, a two-lane County roadway with no shoulders; Avenue 320, a two-lane County roadway with no shoulders; and Road 228, a two-lane County roadway with no shoulders.

Alternatives 2, 3, and 6

Alternatives 2, 3, and 6 would cross the same roadways as the Proposed Project for the initial 1.1 miles of the alignments north of Rector Substation. The alternatives would continue north and would cross SR 198 and SR 216. From where Alternative 6 would progress east, then north, before joining Alternative 2, it would cross several local public and private roads, including Road 156, which had a 2007 annual ADT level 1,820 (TCAG, 2009); Avenue 352, with a 2007 annual ADT level of 600 (TCAG, 2009); and Avenue 360. Where Alternative 2 would progress east, it would cross local public roads including Millwood Drive. Alternative 3 would continue north and would cross SR 201. East of SR 201, the alignment would cross very few public roadways and would primarily cross existing County fire roads. Boyd Road a narrow asphalt and gravel County roadway with no shoulders would also be crossed.

Public Transit

Tulare County Area Transit (TCaT) provides fixed route transit services between large and small communities throughout the greater Tulare County Area. TCaT Route 30 operates within the study area. (TCRMA, 2009) The Proposed Project would not cross any roadways used by Route 30 bus. Alternatives 2, 3 and 6 would cross the Route 30 line at SR 216 (Ivanhoe Drive).

Bicycle and Pedestrian Transportation

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways (Class 1). Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs (Class 2). Bike routes are roadways that are designated for bicycle use, but do not have additional width for bicycle lanes (Class 3). The Proposed Project and alternatives would not cross any designated bicycle facilities (TCAG, 2007).

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. While the Proposed Project and alternatives would cross a number of public and private roadways, it appears that they would not cross any designated pedestrian facilities.

Airports

There are eight public use airports in Tulare County. These include five publicly owned and operated facilities and three privately owned and operate airports (County of Tulare, 2007). The largest general aviation airport in the study area is Visalia Municipal Airport, located approximately 10 miles to the west of Rector Substation near the junction of SR 99 and SR 198. The nearest airport to any the Proposed Project or alternative alignments is Woodlake Airport, approximately 1.5 miles south and 2.1 miles north of Alternative 6 and the Proposed Project, respectively.

Rail Service

The Union Pacific Railroad (UPRR), the Burlington Northern & Santa Fe Railroad (BNSFRR) and the San Joaquin Valley Railroad (SJVRR) all provide freight service in Tulare County. Passenger rail service is provided by AMTRAK (San Joaquin Service). The Proposed Project would cross an active UPRR line at two locations. Alternatives 2, 3, and 6 would cross the UPRR line at two locations. Alternative 2 would also cross the BNSF line.

Regulatory Context

The development and regulation of the study area transportation network involves State and local jurisdictions. State jurisdiction includes permitting and regulation of the use of State roads, while local jurisdiction includes implementation of State permitting, policies, and regulations, as well as management and regulation of local roads. Construction work that would occur within or over a public roadway would require encroachment permits prior to commencing work in the public ROW from all jurisdictions that manage or maintain the applicable roadway(s).

Caltrans' construction practices require temporary traffic control planning for any time the normal function of a roadway is suspended. In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbances. Caltrans regulations would apply to the transportation of oversized loads associated with the construction of the Proposed Project or alternatives. Likewise, County and local (City of Visalia and City of Farmersville) regulations related to ROW encroachment and oversized loads would apply to the construction of the Proposed Project or alternatives. However there are no applicable plans and policies within the Tulare County, Fresno County, City of Visalia, or City of Farmerville general plans.

4.14.2 Significance Criteria

Based on criteria in Appendix G of the CEQA Guidelines, a project would be considered to have a significant effect on the environment if it would:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections);
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Result in inadequate emergency access;
- f) Result in inadequate parking capacity;

- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.).

4.14.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on transportation and traffic.

4.14.4 Impacts and Mitigation Measures

Approach to Analysis

According to the CEQA *Guidelines*, a project would normally result in an impact to transportation and traffic if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Occasional post-construction maintenance activities involving one or two vehicle trips at a time would briefly affect only local segments. Therefore, long-term operational impacts would be inconsequential.

The duration of potentially significant impacts related to short-term disruption of traffic flow and increased congestion generated by construction vehicles and/or loss of a travel lane to accommodate the construction work zone, would be limited to the period of time needed to complete construction of a project component. Therefore, mitigation measures identified below focus on reducing the short-term construction effects of the Proposed Project. Short-term impacts associated with transportation and traffic would result from increases in traffic volumes, temporary closure of roads and loss of travel lanes, and potential safety effects.

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections).**

The Proposed Project would not introduce any new uses to the project area that would generate long-term changes in traffic. Thus, potential traffic and transportation effects would be confined to construction of the Proposed Project (No Impact).

-
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.**

Impact 4.14-1: Construction activities could adversely affect traffic and transportation conditions in the project area. *Less than significant with mitigation* (Class II)

Proposed Project construction activities are expected to require between nine and 12 months to complete. Heavy truck trips would be required for hauling equipment and materials to and from the construction sites. Construction activities would include hauling of oversize loads, including

pieces of towers and poles, conductor spools, substation hardware, various types of equipment, etc. The peak period of truck trip activity is estimated to occur during foundation and structure (i.e., poles and towers) installation. Assuming the use of two crews for foundations and two crews for structure hauling, the average peak truck activity is estimated to be 32 truck round trips per day that would occur over a period of approximately 40 days. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles.

Daily vehicle trips would be generated associated with the arrival and departure of construction workers. It is estimated that several construction crews would operate concurrently each day, with a peak of up to 50 workers associated with the Proposed Project. Assuming a trip generation rate of 1.5 round trips per day per worker, the 50 employees would not be anticipated to exceed 75 auto round trips (150 one-way trips) from the construction workers traveling to and from the work sites each day. Accounting for the delivery of construction components and material excavation, the total number of off-site construction truck trips would be up to 32 round trips (64 one-way trips) per work day over a 40 day period. Material staging areas are proposed that would include a field office, provide a reporting area for workers, be used to store materials and equipment, and provide a parking area for project vehicles. Construction workers would park at the staging areas and at the specific project sites.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the Proposed Project. Because not all construction-related trips would be assigned to the same construction location (e.g., crews would be assigned to different sections of the alignment), these project-generated trips would not result in substantial traffic. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways. Short-term construction-generated traffic would result in less than significant impacts (Class III).

Installation of the Proposed Project would require overhead crossings of several public roadways, including Road 168, Walnut Avenue, SR 198, Farmersville Boulevard, Spruce Road, and SR 65. The installation of the transmission lines across these roadways would temporarily disrupt existing transportation and traffic patterns in the vicinity of the crossings. Impacts would include direct disruption of traffic flows and street operations. In addition to transmission line stringing activities over public roads, the Proposed Project would cross private roads, potentially resulting in short-term (e.g., a couple of hours) restrictions to private property access.

Prior to stringing conductor, temporary guard structures are proposed to be installed along the road crossings for public protection. The purpose of the guard structures would be to prevent the conductor from being lowered or falling into traffic. The guard structures would consist of 60 to 80 foot standard wood poles placed on each side of the road being crossed. It should be noted that the use of guard structures during transmission line stringing activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway. For example,

Caltrans typically requires short-term road closures at crossings where lines are strung over State routes, and the County or city may require other or additional safety measures as part of its encroachment permit requirements. While SCE would obtain and comply with State and local road encroachment permits for public roads that are crossed by the approved transmission line, temporary closures of roads and/or lanes could result in potentially significant impacts related to traffic congestion. However, implementation of Mitigation Measures 4.14-1a, 4.14-1b, and 4.14-1c would ensure that impacts would be less than significant.

Mitigation Measure 4.14-1a: SCE shall also coordinate short-term construction activities at private road crossings with the applicable private property owners. Copies of all encroachment permits and evidence of private property coordination shall be provided to the CPUC prior to the commencement of construction activities.

Mitigation Measure 4.14-1b: SCE shall prepare and implement a Traffic Management Plan subject to approval of Caltrans and/or the applicable local government(s). The approved Traffic Management Plan and documentation of agency approvals shall be submitted to the CPUC prior to the commencement of construction activities. At a minimum, the plan shall:

- Include a discussion of work hours, haul routes, work area delineation, traffic control and flagging;
- Identify all access and parking restriction and signage requirements;
- Require workers to park personal vehicles at the approved staging area and take only necessary project vehicles to the work sites;
- Lay out plans for notifications and a process for communication with affected residents and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints; and
- Include plans to coordinate all construction activities with emergency service providers in the area, consistent with Mitigation Measure 4.12-2 (see Section 4.12, *Public Services*). Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times.
- Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow.

Mitigation Measure 4.14-1c: SCE shall coordinate with Caltrans local government(s), and/or any other appropriate entity, regarding measures to minimize the cumulative effect of simultaneous construction activities in overlapping areas.

Significance after Mitigation: Less than significant.

Operations

Once constructed, the transmission lines would require routine maintenance trips, inspection, and vegetation management activities. Vegetation management in the transmission line corridors could include control of noxious weeds and trimming of shrubs or trees for safety upkeep and would be limited to seasonal and yearly traffic. Maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs and the increase in traffic due to new ROW transmission line corridor maintenance would be imperceptible to background traffic already in the area and, therefore, would not result in an increase in traffic in the project area (No Impact).

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks.

The Proposed Project would make intermittent use of helicopters, but would not change air traffic patterns in the area. No impacts would occur because the nearest airport (Woodlake Airport) is approximately 2.1 miles from the project area; therefore, there would be no impacts related to air traffic patterns (No Impact).

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact 4.14-2: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. *Less than significant with mitigation (Class II)*

The Proposed Project would not change the configuration (alignment) of area roadways, and would not introduce types of vehicles that are not already traveling on area roads. However, heavy equipment operating adjacent to or within a road ROW could increase the risk of accidents. Construction related trucks on local and State roadways would interact with other vehicles. Potential conflicts could also occur between construction traffic and alternative modes of transportation (e.g., bicyclists and buses).

Implementation of Mitigation Measure 4.14-1b requires SCE to prepare a Traffic Management Plan in accordance with professional engineering standards prior to construction, including compliance with roadside safety protocols to reduce the risk of accidents. Therefore, temporary increases in the potential for traffic accidents associated with the Proposed Project would be mitigated to a less than significant level.

Mitigation Measure 4.14-2: Implement Mitigation Measure 4.14-1b.

Significance after Mitigation: Less than significant.

e) Result in inadequate emergency access.

Impact 4.14-3: Construction activities could result in delays for emergency vehicles on project area roadways. *Less than significant with mitigation (Class II)*

Construction of the Proposed Project would have temporary effects on traffic flow, particularly where the line would be constructed over roadways. Transmission line installation across roads and the temporary reduction in travel lanes could result in delays for emergency vehicles passing through the vicinity of a Proposed Project work area.

Implementation of Mitigation Measure 4.14-1b requires the construction contractor to coordinate all construction activities with emergency service providers in and along the Proposed Project to minimize disruption to emergency vehicle access to land uses along the corridors. Specific requirements are identified under Mitigation Measure 4.14-1b and 4.12-2 (see Section 4.12, *Public Services*). Implementation of these measures would ensure that potential impacts associated with temporary effects on emergency access would be mitigated to less than significant levels.

Mitigation Measure 4.14-3: Implement Mitigation Measures 4.14-1b and 4.12-2.

Significance after Mitigation: Less than significant.

f) Result in inadequate parking capacity.

Impact 4.14-4: Construction activities could result in inadequate parking capacity within the project area. *Less than significant (Class III)*

Construction vehicles associated with the Proposed Project that would transport materials and workers on a daily basis to and from the staging area would be parked overnight at the staging area. Other vehicles would be parked at the various construction sites within the transmission corridor if space is available and some workers would park near that day's construction site. Nonetheless, given the dispersed nature and small size of the proposed construction workforce, the Proposed Project would not generate a substantial number of parked vehicles along the project corridor at any one location, and impacts would be relatively brief; therefore, impacts would be less than significant.

Mitigation: None required.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.).

The Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation because the project would not require an increase in long-term use of traditional modes of transportation (No Impact).

4.14.5 Cumulative Impacts

The geographic context for the cumulative impacts associated with transportation and traffic issues is primarily limited to the areas where transportation facilities (e.g., roads, railroads, etc) would be crossed during conductor stringing activities.

Proposed Project construction activities, as described in Chapter 2, *Project Description*, could have a temporary construction-related impact on local traffic flow in the Proposed Project area as street and lane closures may be required. The geographic context for the cumulative impacts associated with transportation and traffic issues is primarily limited to the areas where transportation facilities (e.g., roads, railroads, etc) would be crossed during conductor stringing activities. In conjunction with other construction projects identified in Section 3.6, *Cumulative Projects*, potential cumulative impacts could occur. For example, the County of Tulare has proposed to widen Farmersville Boulevard in the general vicinity of the area associated with the Proposed Project. Caltrans has likewise identified improvements to SR 65 within the Proposed Project area. Two other Caltrans projects (i.e., SR 198 and Millwood Road) are located within the alternative project areas. If any of these projects were to occur at the same time, a cumulative traffic impact could result at certain access locations to the Proposed Project. However, as identified above, Mitigation Measure 4.14-1b requires SCE to prepare a Traffic Management Plan prior to construction and Mitigation Measure 4.14-1c requires SCE to coordinate with appropriate agencies to minimize the cumulative effect of simultaneous construction activities.

In addition to cumulative construction impacts, cumulative operational impacts could occur. For example, Caltrans plans to widen SR 65 to a four-lane expressway from Hermosa Avenue to SR 198. Because the Proposed Project would result in a new transmission line crossing of this segment of SR 65, the potential exists that one of the new towers could be placed too close to SR 65, potentially resulting in a conflict with the road widening project. However, Mitigation Measure 4.14-1c requires SCE to coordinate with appropriate agencies, including Caltrans, to minimize the cumulative effect of simultaneous construction activities in overlapping areas. Implementation of this measure would ensure that SCE would coordinate with Caltrans regarding the Proposed Project and its projects to avoid potential conflicts.

Implementation of Mitigation Measures 4.14-1b and 4.14-1c would ensure that the Proposed Project's contribution to transportation and traffic-related cumulative impacts during construction would not be cumulatively considerable. During operation, maintenance activities would not

increase above existing levels that are employed to maintain the existing transmission line ROWs, and the increase in traffic due to new ROW transmission line corridor maintenance would be inconsequential. Impacts would therefore be mitigated to less than significant (Class II).

4.14.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no transportation or traffic related impacts would occur (No Impact).

Alternative 2

Impacts to transportation and traffic under Alternative 2 would be generally similar to the Proposed Project. Alternative 2 is located further north of the cities Farmersville and Exeter and would cross different roads than the Proposed Project. Alternative 2 would cross a portion of SR 198 that is a four-lane controlled access freeway and two local roads that parallel SR 198 (i.e., Avenue 296 and E. Noble Avenue), whereas the Proposed Project would cross SR 198 where it is a two-lane highway that experiences lower traffic volumes. Alternative 2 would also cross a few more local roads, and would take longer to construct, compared to the Proposed Project. Therefore, Alternative 2 would be slightly more adverse than the Proposed Project in terms of potential impacts to local traffic during the construction period. However, implementation of the same mitigation measures for the Proposed Project would reduce these impacts to less than significant (Class II).

Alternative 3

Impacts to transportation and traffic under Alternative 3 would be generally similar to the Proposed Project. Alternative 3 is located further north of the cities of Farmersville and Exeter and would cross different roads than the Proposed Project. Alternative 3 would cross a portion of SR 198 that is a four-lane controlled access freeway and two local roads that parallel SR 198 (i.e., Avenue 296 and E. Noble Avenue), whereas the Proposed Project would cross SR 198 where it is a two-lane highway that experiences lower traffic volumes. Alternative 3 would also take longer to construct than the Proposed Project. Therefore, Alternative 3 would be slightly more adverse than the Proposed Project in terms of potential impacts to local traffic during the construction period. However, implementation of the same mitigation measures for the Proposed Project would reduce these impacts to less than significant (Class II).

Alternative 6

Impacts to transportation and traffic under Alternative 6 would be generally similar to those described for the Proposed Project. The east-west segment of Alternative 6 is located north of the Proposed Project, north of Ivanhoe and Woodlake, and would cross different roads than the Proposed Project. Alternative 6 would cross a portion of SR 198 that is a four-lane controlled access freeway and two local roads that parallel SR 198 (i.e., Avenue 296 and E. Noble Avenue), whereas the Proposed Project would cross SR 198 where it is a two-lane highway that experiences lower traffic volumes. Alternative 6 would also cross approximately 10 more local roads when compared to the Proposed Project as well as two additional State Routes (i.e., SR 216 and SR 245). Alternative 6 would also take longer to construct than the Proposed Project. Therefore, Alternative 6 would be more adverse than the Proposed Project in terms of potential impacts to local traffic during the construction period. However, implementation of the same mitigation measures for the Proposed Project would reduce these impacts to less than significant (Class II).

References – Transportation and Traffic

- Caltrans (California Department of Transportation), 2008. Traffic and Vehicle Data Systems Unit, 2007 All Traffic Volumes on CSHS – Accessed website - (<http://traffic-counts.dot.ca.gov/2007all.htm>) on April 21, 2009.
- County of Tulare, 2007. General Plan Background Report, December 2007. Page 5-28 and 5-67.
- Tulare County Association of Governments (TCAG), 2007. *Bicycle Transportation Plan*, September 2007.
- TCAG, 2009. Traffic County webpage (<http://www.tularecog.org/trafficcount.php>), Traffic Counts 2006 – 2010. Accessed April 21, 2009.
- Tulare County Resource Management Agency (TCRMA), 2009. Accessed the Tulare County Area Transit (TCaT) website (<http://www.co.tulare.ca.us/government/rma/trans/transit.asp>) on April 21, 2009.

4.15 Utilities and Service Systems

The Proposed Project and alternatives parallel numerous public utility and service systems, including water, sewer, solid waste, electric, natural gas, and telecommunication lines in Tulare County, the cities of Visalia and Farmersville, and the community of Lemon Cove. Various entities operate these systems and provide services to residents and businesses in the vicinity of the study area.

4.15.1 Setting

Water

A multitude of domestic water service providers, both public and private, service the unincorporated areas of Tulare County. Providers include Community Service Districts (CSDs), sanitary districts, County Service Areas (CSAs), irrigation districts (IDs), mutual water companies, and public utility districts (PUDs). Individual water systems are the predominant water supply for domestic use within the unincorporated communities of Tulare County (Tulare County, 2007). If the water system has fewer than 200 service connections, it is overseen by the Tulare County Environmental Health Department (Hemans, 2008). If the system has more than 200 service connections, it is regulated directly by the State of California Department of Public Health, Fresno office. The State does not regulate personal water wells with four or less service connections, though the Environmental Health Department performs some health testing during permitting processes (Hemans, 2008).

The California Water Service Company provides water service to the City of Visalia. Current water demand in the City of Visalia averages 24 million gallons per day (Mgal/d), and the California Water Service Company delivers potable water to approximately 38,000 residential, commercial, and industry/institutional customer connections (California Water Service Company, 2008). All business customers are supplied water on a metered basis (Boswell, 2008). Residential customers with houses built before 1987 are supplied water with a flat rate; houses constructed in 1987 and after are billed on a metered basis (Boswell, 2008). The City of Visalia has no surface water, and no primary well (Johnson, 2008). There are 79 wells located throughout the city that provide the City's water supply. The City does not use a specific well as an emergency back-up water supply; rather, it has two small tanks for back-up storage, each of which holds 300,000 gallons. Future increases in water supply will be from new wells (Johnson, 2008).

The City of Farmersville provides water service through its Department of Public Works, and obtains its water from underground supplies. In 2007, water demand in the City of Farmersville ranged from approximately 1.2 Mgal/d in January to 3.09 Mgal/d in July, with an average of 1.98 Mgal/d (Wyckoff, 2008). The City delivers potable water through approximately 3,000 service connections to customers on a flat-rate basis. The City serves a small number of businesses on a metered basis; however, it is planning to shift all customers to a metered basis within the next three years. Six wells, named 1a, 2a, 3a, 4a, 5a, and 6a, provide the City's water supply. The wells are on a looped pressure system, provide relatively equal service, and have a combined capacity of approximately eight Mgal/d. Future increases in water supply will be from

new wells. A seventh well is due to begin service in the near future, and will add approximately 1,800 gallons per minute (gpm). Though the City has emergency backup power on three of the existing six wells and will have it on the new well, the City has no emergency back up water supply and no reservoir storage (Wyckoff, 2008).

The Tulare Irrigation District (TID) maintains a canal that runs along the west side of Farmersville. The TID obtains and delivers surface water supply to approximately 230 farms in the TID service area (including farms in Farmersville), and provides water for 1,100 acres of groundwater recharge/regulation basins underlying the TID (Tulare Irrigation District, 2008).

The Lemon Cove Sanitary District (also known as the Lemon Cove Water Company), a special district, serves the unincorporated community of Lemon Cove. The water system delivers potable water to residential, commercial, and industry/institutional customers through 50 domestic water service connections on a metered basis (Tulare County, 2007). The Keller-Wegley McKay's Point Lemon Cove Well, which pumps 50 gpm, provides the community's water supply (Pensar, 2008). The well has a two-horsepower submersible pump and is connected to a 30,000 gallon storage tank, booster pump, and a 4,000 gallon pressure tank. The water system has no reservoir storage. Future increase in water supply would likely be derived from new wells (Tulare County, 2007).

Sanitary Sewer

In unincorporated areas of Tulare County, special districts generally operate and manage sanitary sewer services. These special districts include: PUDs, CSDs, CSAs, sanitary districts, and sewer maintenance districts (Tulare County, 2007). The Tulare County Resource Management Agency (RMA) has jurisdiction over lands not included in these special districts; any permit for a project requiring sewage disposal in these areas must be approved by the RMA (Williams, 2008). Individual or community septic systems serve some of the unincorporated urban areas within Tulare County that are lacking sanitary sewer infrastructure (Tulare County, 2007).

The City of Visalia Department of Public Works provides sanitation service in the City. The City maintains sewer lines and a wastewater treatment plant. The City provides sanitation services for an estimated 120,000 residential, commercial, and industry/institutional customers, through approximately 35,000 connections. The wastewater treatment plant has an average dry and wet weather capacity of approximately 22 Mgal/d (Ross, 2008).

The City of Farmersville Public Works Department provides sanitation service in the City. The City handles all aspects of its wastewater treatment, which includes maintaining sewer lines and a wastewater treatment plant. The City provides sanitation services for approximately 3,000 service connections, for residential, commercial, and industry/institutional customers. The wastewater treatment plant has an average dry weather capacity of 1.25 Mgal/d (Wyckoff, 2008).

The Lemon Cove Sanitary District (LCSD) provides sanitation service in the unincorporated community of Lemon Cove. LCSD provides collection and primary treatment services for the community's approximately 300 residents. Permitted capacity is 0.020 Mgal/d, and average dry weather flow is 0.012 Mgal/d (Tulare County, 2007).

Electricity and Natural Gas

SCE is the primary provider of electrical services throughout Tulare County, though PG&E also serves northern Tulare County on a limited basis. The Gas Company (formerly Southern California Gas Company) provides natural gas services (Tulare County, 2007).

Telephone

AT&T, Ducor, Sprint and Verizon provide telephone services in Tulare County. These companies supply local and long distance calling, Internet access, and wireless services to commercial and residential customers (Tulare County, 2007).

Solid Waste and Recycling Service

Private haulers licensed through Tulare County provide solid waste collection and disposal services to unincorporated areas of the County. The City of Visalia employs its own haulers to provide solid waste collection and disposal services for residential and nonresidential areas in the cities of Visalia and Farmersville (Manuele, 2008).

Solid waste generated within the project area would primarily be disposed of at the Visalia Landfill (Manuele, 2008). The Visalia Landfill is located on Road 80, north of Avenue 328, approximately four miles northwest of the City of Visalia, and is currently permitted to accept 2,000 tons of solid waste per day. It has an estimated remaining capacity of 16 million cubic yards (86.7 percent) until 2024 (CIWMB, 2008).

Two other landfills exist that serve Tulare County: the Woodville Disposal Site and the Teapot Dome Disposal Site. The Woodville Disposal Site is located on Road 152 approximately five miles south of SR 137 near Avenue 200, approximately seven miles southeast of the City of Tulare. It is currently permitted to accept 2,000 tons of solid waste per day and has an estimated remaining capacity of 16 million cubic yards (58.5 percent) until 2026. The Teapot Dome Disposal Site is located on Avenue 128 east of Road 208, approximately five miles southwest of the City of Porterville. It is currently permitted to accept 600 tons of solid waste per day and has an estimated remaining capacity of one million cubic yards (15.3 percent) until 2012 (CIWMB, 2008).

Regulatory Context

State

Protection of Underground Infrastructure

Section 1, Chapter 3.1 “Protection of Underground Infrastructure,” Article 2 of California Government Code 4216 requires that utility operators and other excavators must contact a regional notification center at least two days prior to excavation of any subsurface installations. The notification center for southern California is Underground Service Alert. Any utility provider seeking to begin an excavation project must call Underground Service Alert’s toll-free hotline. In turn, Underground Service Alert will notify the utilities that may have buried lines within

1,000 feet of the excavation. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of excavation. The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

Assembly Bill 939

Assembly Bill 939 (AB 939), enacted in 1989 and known as the Integrated Waste Management Act, required each city and/or county's Source Reduction and Recycling Element to reduce the amount of waste being disposed to landfills, with diversion goals of 50 percent by the year 2000. Tulare County, which includes the cities of Visalia and Farmersville and the community of Lemon Cove, had a diversion rate of 46 percent in 2005 and 52 percent in 2006¹ (Ackley, 2008).

Local

Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following goals and policies have been identified in the Water Element of the Tulare County General Plan and may be applicable to the Proposed Project and alternatives:

Policy 2.B.10: New or greatly improved sewer systems and facilities should be constructed for Richgrove, Traver, East Orosi, Tract 92, Goshen, Poplar-Cotton Center, Lemon Cove, Terra Bella and Camp Nelson, as feasible, subject to allocation of County resources.

(Tulare County, 2001).

Tulare County Construction and Demolition Debris Ordinance (Proposed Project and Alternatives 2, 3 and 6)

The Tulare County Construction and Demolition Ordinance (Ordinance Number 3321), adopted in 2006, establishes regulations for the recycling and diversion of Construction and Demolition (C&D) Debris within unincorporated areas in Tulare County. According to the ordinance, every applicant requesting a building or demolition permit for an applicable project must first submit a properly completed C&D Debris Recycling and Reuse Plan to the Tulare County Resource Management Agency's Permit Center. Within 30 days of project completion the applicant must also submit a C&D Debris Recycling and Reuse Final Compliance report. Diversion requirements stipulate that 100 percent of inert solids and at least 50 percent by weight of the remaining C&D debris resulting from the project must be diverted to an approved facility or by salvage (Fussel, 2008).

City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)

The following goals and policies identified in the Land Use Element of the City of Visalia General Plan may be applicable to the Proposed Project and alternatives:

Policy 2.2.5: Promote solid waste recycling to conserve limited natural resources.

¹ In 2005, Tulare County was divided into two Regional Agencies. The first, Unincorporated Tulare County, had a diversion rate of 47 percent. The second, called Consolidated Waste Management Authority (CWMA), was comprised of the Cities of Dinuba, Lindsay, Porterville, Tulare and Visalia, and had a diversion rate of 46 percent. In 2006, CWMA added Unincorporated Tulare County to its membership.

Policy 2.4.2: Development shall not occur unless water supplies are available to adequately serve the project.

Goal 5: Plan and develop an efficient public facilities and services system to serve as a framework for orderly urban development.

(City of Visalia, 1996).

City of Visalia Construction and Demolition Debris Ordinance (Proposed Project and Alternatives 2, 3 and 6)

Regulations for the recycling and diversion of Construction and Demolition (C&D) Debris are provided in the City of Visalia Ordinance Code Chapter 829.00. According to the ordinance, prior to issuance of building or demolition permits involving any Covered Project, every applicant must complete and submit a properly completed C&D Recycling and Reuse Plan to the Building Official with the City of Visalia. The plan must be completed within 30 days of the project final. Diversion requirements state that 100 percent of inert solids and at least 50 percent by weight of the remaining C&D debris resulting from the project shall be diverted to an approved facility or by salvage (City of Visalia, 2008).

City of Farmersville General Plan (Proposed Project)

The following goals and policies identified in the Land Use Element of the City of Farmersville General Plan may be applicable to the Proposed Project:

Infrastructure Goal III: Maintain, rebuild and upgrade infrastructure systems.

Objective 3: The City should work with the private sector to participate in the upgrading of the infrastructure system when it is developing in the city.

Action plan a: From time to time, the City may wish to work with a developer to upgrade a part of the infrastructure or street system that is not part of the project being developed.

(City of Farmersville, 2002).

4.15.2 Significance Criteria

Based on criteria in Appendix G of the CEQA Guidelines, a project would be considered to have a significant effect on the environment if it would:

- a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- d) Require new or expanded water supply resources or entitlements;

- e) Result in a determination by the wastewater treatment provider that would serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- f) Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs;
- g) Not comply with federal, state, and local statutes and regulations related to solid waste;
- h) Contact and/or disturb underground utility lines and/or facilities during construction activities.

4.15.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on utilities and service systems.

4.15.4 Impacts and Mitigation Measures

Approach to Analysis

This section presents an analysis of the potential utility service impacts associated with the construction, operation, and maintenance of the Proposed Project.

The proposed modifications at the Springville, Vestal, and Big Creek 3 Substations consist solely of electrical system and safety upgrades, and the associated construction, operation, and maintenance activities would have no impact to water, wastewater, storm water, or solid waste treatment or facilities. Similarly, the same type of electrical system and safety upgrade activities proposed for the Rector Substation would not have any potential impacts to water, wastewater, storm water, or solid waste treatment or facilities. Therefore, potential impacts will not be discussed further in this section.

a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Impact 4.15-1: The Proposed Project could conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board. *Less than significant (Class III)*

The Proposed Project would not cause impacts to wastewater. Portable toilets would be utilized only during construction (a one-time limited timeframe) and waste would be disposed of according to required regulations. No additional wastewater would be generated during operation of the project; therefore, this impact would be less than significant. See also, e) below.

Mitigation: None required.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact 4.15-2: The Proposed Project could require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. *Less than significant* (Class III)

The Proposed Project would require water use during construction, primarily for periodic dust control on access roads. However, this water use would be temporary in nature and would not generate wastewater that would require treatment or disposal. Operation of the Proposed Project would not require the use of water, and would therefore not create any demand for wastewater treatment or disposal. Consequently, the Proposed Project would not require or result in the construction of new or expanded water or wastewater treatment plant facilities; therefore, this impact would be less than significant. See also, d) and e) below.

Mitigation: None required.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact 4.15-3: The Proposed Project could require or result in the construction of new storm drainage facilities or expansion of existing facilities. *Less than significant* (Class III)

The Proposed Project would require the replacement of 26 single circuit lattice towers with approximately six double circuit tubular poles and one steel lattice structure along 1.1 miles of existing right-of-way (ROW), and would require the installation of approximately 96 double circuit tubular poles, six single-phase tubular poles and 12 double circuit lattice towers along the existing and new ROW. For the towers that would be removed and not replaced in the same location, holes would be filled and compacted, and the area would be smoothed to match surrounding grade. Restoration would include grading to original contours and reseeding where appropriate. Tower installation sites, work areas, pull and tension sites, staging area, and access roads required for the Proposed Project would not result in a net increase in impervious surfaces, as no surfaces associated with the Proposed Project would be paved.

The Proposed Project would also involve modifications at the Rector, Big Creek 3, Vestal, and Springville Substations that would consist of installing new cable, conduit, and protective relays, and removing a wave trap and line tuner. The project would also require the construction of one Mechanical and Electrical Equipment Room (MEER) to house relay equipment, as well as eight miles of new 20-foot wide access roads. However, all substation modifications, including construction of the MEER, would occur within the existing fence lines of the substations. Furthermore, the new access roads would remain unpaved. Consequently, none of these modifications would substantially increase runoff.

Since the Proposed Project would not substantially increase the amount of impervious surfaces, it would not create a significant amount of additional runoff water. Therefore, the Proposed Project would not require or result in the construction of a new or expanded storm drainage facility, and the impact would be less than significant.

Mitigation: None required.

d) Require new or expanded water supply resources or entitlements.

Impact 4.15-4: The Proposed Project could require new or expanded water supply resources or entitlements. *Less than significant (Class III)*

Operation of the Proposed Project would not require the use of water. The primary use of water during construction of the Proposed Project would be for dust suppression measures on access roads. The water that would be required for construction of the transmission line would be trucked in from off-site. Dust suppression would be performed as necessary and is not anticipated to occur on a regular basis. A small amount of water would also be available for fire suppression. The working crew would bring in drinking water from off-site. Water used during the construction period would be available from existing municipal water sources and would not require local water providers to obtain additional water entitlements. The amount of water required for construction of the Proposed Project would be negligible. Impacts would be less than significant.

Mitigation: None required.

e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact 4.15-5: The Proposed Project could affect the wastewater treatment providers' ability to serve the Proposed Project's projected demand in addition to the providers' existing commitments. *Less than significant (Class III)*

As described in d), the primary use of water during construction of the Proposed Project would be for dust suppression measures on access roads. Disposal would not be required because the water used during dust suppression activities would be minimal and consequently this water would evaporate or be absorbed into the ground. In addition, construction crews would use portable sanitation facilities (portable toilets), generating relatively small volumes of wastewater for a limited time during the construction phase. Sanitation waste would be disposed of according to sanitation waste management practices. No other sources of wastewater are anticipated during the Proposed Project construction activities, and operation of the Proposed Project would not require the use of water. The negligible amount of water used during construction would not affect the wastewater treatment facilities' abilities to serve the Proposed Project's projected

demand in addition to the provider's existing commitments; therefore, this impact would be less than significant.

Mitigation: None required.

f) Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Impact 4.15-6: The Proposed Project could be serviced by a landfill with insufficient capacity to accommodate the Proposed Project's solid waste disposal needs. *Less than significant* (Class III)

Operation of the Proposed Project would not generate solid waste and would therefore not affect existing landfill capacities. Construction of the Proposed Project would generate various waste materials, largely in the form of soil, vegetation, utility line cables, and scrap metal from the replacement of existing towers and substation modifications. This impact would be short-term and of short duration.

As described in Chapter 2, *Project Description*, the Proposed Project would require the removal and disposal of approximately 26 existing 220 kV lattice steel towers and associated hardware (i.e., insulators, vibration dampeners, suspension clamps, ground wire clamps, shackles, links, nuts, bolts, washers, cotter pins, insulator weights, and bond wires), as well as the transmission line primary conductors, ground wire and footings. Solid waste from the Proposed Project would be separated by construction crews at the project site into salvageable, recyclable, and non-reusable items. Items that could be recycled and salvaged (including conductor wire, steel from towers, and hardware) would be separated into roll-off boxes and transported to one of two material staging areas. These staging areas would be located at existing commercial facilities near the project site, and are anticipated to be no larger than five acres each. There, items would be sorted, and baled, and then sold through available markets. The wood poles used for guard structures and possible telecommunications support would be returned to the material staging yard, and depending on the condition of each pole, may be reused, disposed of in a Class I hazardous waste landfill, or in the lined portion of a Regional Water Quality Control Board (RWQCB) certified municipal landfill. Other miscellaneous non-hazardous construction materials that cannot be reused or recycled would be disposed of at municipal county landfills, such as the Visalia Solid Waste Landfill in Tulare County. Any hazardous material would be recycled, treated and/or disposed of in accordance with federal and local laws. Impacts related to the removal and disposal of treated wood and construction materials would be less than significant (see Section 4.7, *Hazards and Hazardous Materials* for additional information).

Soil and vegetative matter from excavations and land-clearing for new tower foundations would be screened and separated for use as backfill materials at the project sites to the maximum extent possible. Soils and vegetative matter unsuitable for backfill use would be disposed of at appropriate disposal sites.

As discussed in the Setting, the Visalia Landfill currently has a remaining permitted capacity of approximately 16 million cubic yards and is not estimated to close until 2024 (CIWMB, 2008). Because the majority of waste resulting from the removal of lattice steel towers would be included under the Tulare County and/or City of Visalia C&D Debris Ordinances and is salvageable, and because the local landfill has sufficient capacity to accept the remainder of SCE's construction waste, this would be a less than significant impact.

Mitigation: None required.

g) Comply with federal, state, and local statutes and regulations related to solid waste.

Impact 4.15-7: The Proposed Project could conflict with federal, state, and local statutes and regulations related to solid waste. *Less than significant (Class III)*

As discussed above, the Proposed Project would generate waste during construction. Construction waste would include the one time disposal of material that could not be recycled or reused. Transmission line operation and maintenance are not anticipated to produce additional solid waste. The construction waste generated would be minimal and SCE would dispose of the waste in an appropriate landfill. As discussed above, landfills within the project area have sufficient capacity to accept anticipated project waste.

Tulare County has an adopted the Countywide Source Reduction and Recycling Element (SRRE) that establishes goals and methodologies for compliance with the California AB 939, which establishes 50 percent diversion of solid waste from landfills. As stated earlier, Tulare County's diversion rate in 2005 was 46 percent and in 2006 was 52 percent (Ackley, 2008); therefore the County met the requirement of AB 939 in 2006 but not in 2005. The California Integrated Waste Management Board's Recycling Market Development Zone (RMDZ) program is helping the County meet the AB 939 goal. This program includes the entire County and offers low-interest loans up to two million dollars, technical assistance on financing strategies and assistance in marketing zones nationally and internationally (Ford, 2008).

As stated in the regulatory setting, Tulare County, the cities of Visalia and Farmersville all have construction and demolition ordinances that establish diversion requirements for construction and demolition. SCE would reduce their construction material and treated wood pole waste through the measures described above in Impact 4.15-6 consistent with Tulare County and the cities of Visalia and Farmersville recycling and reduction policies. Thus, impacts related to conflicts with statutes and regulations relating to solid waste and recycling would be less than significant.

Mitigation: None required.

h) Contact and/or disturb underground utility lines and/or facilities during construction activities.

Impact 4.15-8: The Proposed Project could contact and/or disturb underground utility lines and/or facilities during construction activities. *Less than significant (Class III)*

Construction activities could inadvertently contact underground facilities (i.e. natural gas, water, or sewer pipelines) during pole/tower excavation, pole/tower installation, and/or grading of work areas for the Proposed Project, possibly leading to short-term utility service interruptions. Prior to construction, surveys would be conducted by SCE to locate all underground and overhead utilities in the project area. As described above, SCE is required by State law to contact Underground Service Alert at least two working days prior to initiation of construction activities with ground disturbance. Underground Service Alert verifies the location of all existing underground facilities and alerts the other utilities to mark their facilities in the area (within 1,000 feet) of anticipated excavation activities. SCE is also required to manually (by hand) probe and expose any existing buried utilities in the Proposed Project corridors prior to any powered-equipment drilling or excavation. After probing within the corridor for existing utilities, exact placement of the tower and pole foundations would be determined so that they would not conflict with other co-located utilities. Therefore, impacts related to potential underground utility service interruptions would be less than significant.

Mitigation: None required.

4.15.5 Cumulative Impacts

Construction, operation, and maintenance activities associated with the Proposed Project would not result in significant impacts that would affect the ability of Tulare County, the cities of Visalia and Farmersville, and other service providers to effectively deliver public water supply, sanitary sewer (wastewater), solid waste, and other utility services in the service area. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several development projects planned in the vicinity of the project area that may impact utility services. These include numerous new housing subdivisions and the Yokohl Ranch Project – a master planned community of 10,000 residential units, 550,000 square feet of mixed use space, and infrastructure such as roads and utilities. It is likely that this cumulative development would require expansion of existing, or development of new, utility service infrastructure to support the planned population growth. However, these planned developments would be required to comply with all federal, State, and local regulations and ordinances protecting utility services, including complying with all standards of Title 24 of the California Code of Regulations, as well as water conservation measures and waste minimization efforts in accordance with Tulare County and cities of Visalia and Farmersville requirement. Further, because the Proposed Project demand for utility services would occur only during the construction period which would be completed well prior to completion of most of the planned residential development projects, the Proposed Project would have no cumulatively considerable impacts related to utilities and service systems (Class III).

4.15.6 Alternatives

No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented; therefore, no impacts to utilities would occur. The San Joaquin Cross Valley Loop would not be created and the modifications to the four substations would not occur. None of the project objectives would be met and demand in the Electrical Needs Area would not be adequately met. The unequal distribution of load would continue to result in overloads on the 220 kV lines serving Rector Substation from the Big Creek Hydroelectric Project. While this condition would continue to jeopardize SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area, it would not result in physical impacts to utilities and service systems (No Impact).

Alternative 2

Construction, operation and maintenance impacts for this alternative would be similar to those identified for the Proposed Project, which were determined to be less than significant, requiring no mitigation. Construction of Alternative 2 would involve similar construction methods as those described for the Proposed Project. As such, the demands placed on local water, wastewater, storm drainage, and solid waste service providers as a result of this alternative would be identical to that discussed above in Section 4.15.4. Alternative 2 would require the demolition of approximately eight additional miles of single circuit transmission line, compared to the Proposed Project, and would thus generate proportionately more waste from construction activities. However, no part of construction or operation of this alternative would use water or generate wastewater or solid waste in amounts exceeding the capacity of local facilities serving the area. Impacts due to demands on water, wastewater, storm drainage, and solid waste facilities would be less than significant and no mitigation measures would be required. Construction of this alternative would result in a similar potential to contact or disrupt underground utility infrastructure. Actions taken to avoid utilities identified in accordance with Article 2 of California Government Code 4216 (i.e., contact Underground Service Alert and manually probe for existing buried utilities within the ROW) would ensure that construction activities would not result in reductions or interruptions of existing utility systems or cause a collocation accident. Therefore, this alternative would result in less-than-significant impacts to utility services (Class III).

Alternative 3

Construction, operation and maintenance impacts for this alternative would be similar to those identified for the Proposed Project, which were determined to be less than significant, requiring no mitigation. Construction of Alternative 3 would involve similar construction methods as those

described for the Proposed Project. As such, the demands placed on local water, wastewater, storm drainage, and solid waste service providers as a result of this alternative would be identical to that discussed above in Section 4.15.4. Alternative 3 would require the demolition of approximately 13 additional miles of single circuit transmission line, compared to the Proposed Project, and would thus generate proportionately more waste from construction activities. However, no part of construction or operation of this alternative would use water or generate wastewater or solid waste in amounts exceeding the capacity of local facilities serving the area. Impacts due to demands on water, wastewater, storm drainage, and solid waste facilities would be less than significant and no mitigation measures would be required. Construction of this alternative would result in a similar potential to contact or disrupt underground utility infrastructure. Actions taken to avoid utilities identified in accordance with Article 2 of California Government Code 4216 (i.e., contact Underground Service Alert and manually probe for existing buried utilities within the ROW) would ensure that construction activities would not result in reductions or interruptions of existing utility systems or cause a collocation accident. Therefore, this alternative would result in less-than-significant impacts to utility services (Class III).

Alternative 6

Construction, operation and maintenance impacts for this alternative would be similar to those identified for the Proposed Project, which were determined to be less than significant, requiring no mitigation. Construction of Alternative 6 would involve similar construction methods as those described for the Proposed Project. As such, the demands placed on local water, wastewater, storm drainage, and solid waste service providers as a result of this alternative would be identical to that discussed above in Section 4.15.4. Alternative 6 would require the demolition of approximately seven additional miles of single circuit transmission line, compared to the Proposed Project, and would thus generate proportionately more waste from construction activities. However, no part of construction or operation of this alternative would use water or generate wastewater or solid waste in amounts exceeding the capacity of local facilities serving the area. Impacts due to demands on water, wastewater, storm drainage, and solid waste facilities would be less than significant and no mitigation measures would be required. Construction of this alternative would result in a similar potential to contact or disrupt underground utility infrastructure. Actions taken to avoid utilities identified in accordance with Article 2 of California Government Code 4216 (i.e., contact Underground Service Alert and manually probe for existing buried utilities within the ROW) would ensure that construction activities would not result in reductions or interruptions of existing utility systems or cause a collocation accident. Therefore, this alternative would result in less-than-significant impacts to utility services (Class III).

References – Utilities and Service Systems

- Ackley, Patty, 2008. Solid Waste Manager, Tulare County Resource Management Agency. Phone and written communication November 12, 2008.
- Boswell, Brenda, 2008. Temporary Office Manager, California Water Service. Phone conversation on August 5, 2008.
- California Integrated Waste Management Board (CIWMB), 2008. *Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report, Consolidated Waste Management Authority*. <http://www.ciwmb.ca.gov/LGTools/mars/jurdrsta.asp>, accessed August 5, 2008.
- California Water Service Company, 2008. Phone conversation with Doug Camy, Store Keeper. December 31, 2008.
- City of Farmersville, 2002. *Farmersville General Plan*. Adopted November 2002.
- City of Visalia, 2008. *Construction & Demolition (C&D) Debris Ordinance Overview*. Effective March 2006.
- City of Visalia, 1996. *City of Visalia General Plan, Land Use Element, September 1991*. Amended June 1996.
- Ford, Karen, 2008. VP Client Services, Economic Development Corporation, serving Tulare County. Written communication November 13, 2008.
- Fussel, Britt, 2008. Assistant Director, Engineering Branch, Tulare County Resource Management Agency. Phone conversation November 10, 2008.
- Hemans, Chuck, 2008. Water Quality Specialist, Tulare County Environmental Health Department. Phone conversation August 5, 2008.
- Johnson, Steve, 2008. Superintendent of Production, California Water Service. Phone conversation on August 5, 2008.
- Manuele, Candace, 2008. Staff Services Analyst, Waste Department, Tulare County Resource Management Agency. Phone conversation on August 5, 2008.
- Pensar, William, 2008. Lemon Cove Sanitary District/ Lemon Cove Water Company, Phone conversation August 6, 2008
- Ross, Jim, 2008. Manager, Visalia Department of Public Works. Phone conversation, August 6, 2008.
- Tulare County, 2007. *Tulare County General Plan Background Report (Part 4)*, December 2007.
- Tulare County, 2001. *County of Tulare, General Plan Policy Summary*, December 2001.
- Tulare Irrigation District, 2008. http://www.tulareid.org/district_profile.html, accessed August 5, 2008.

William, Ron, 2008. Environmental Health Specialist/Land Use Specialist, Tulare County Health and Human Service Agency. Phone conversation December 30, 2008.

Wyckoff, Dale, 2008. Public Works Supervisor, Farmersville Department of Public Works. Phone conversation on August 6, 2008; written communication August 6, 8, and 11 2008.

CHAPTER 5

Comparison of Alternatives

This section summarizes and compares the environmental advantages and disadvantages of the Proposed Project and the alternatives evaluated in this EIR. This comparison is based on the assessment of environmental impacts of the Proposed Project and each alternative, as identified in Sections 4.1 through 4.15. Chapter 2 introduces and describes the Proposed Project. Chapter 3 introduces and describes the alternatives considered in this EIR.

Section 5.1 describes the methodology used for comparing alternatives. Section 5.2 summarizes the environmental impacts of the Proposed Project and the alternatives. Section 5.3 defines the Environmentally Superior Alternative, based on comparison of each alternative with the Proposed Project. Section 5.4 presents a comparison of the No Project Alternative with the alternative that is determined in Section 5.3 to be environmentally superior.

5.1 Comparison Methodology

CEQA does not provide specific direction regarding the methodology of alternatives comparison. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and permanent loss of habitat or land use conflicts). Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less than significant levels are generally considered to be less important.

This comparison is designed to satisfy the requirements of CEQA Guidelines Section 15126.6[d], Evaluation of Alternatives, which states that:

“The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the proposed project as proposed.”

If the Environmentally Superior Alternative is the No Project Alternative, CEQA requires identification of an Environmentally Superior Alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

The following methodology was used to compare alternatives in this EIR:

- Step 1: Identification of Alternatives.** An alternatives screening process (described in Chapter 3) was used to identify approximately 11 alternatives to the Proposed Project. That screening process identified three alternatives for detailed EIR analysis. Each of the alternatives consists of alignment variations. A No Project Alternative was also identified. No other feasible alternatives meeting the basic project objectives were identified that would lessen or alleviate significant impacts.
- Step 2: Determination of Environmental Impacts.** The environmental impacts of the Proposed Project and alternatives were identified in Sections 4.1 through 4.15, including the potential impacts of construction and operation.
- Step 3: Comparison of Proposed Project with Alternatives.** The environmental impacts of the Proposed Project were compared to those of each alternative to determine the Environmentally Superior Alternative. The Environmentally Superior Alternative was then compared to the No Project Alternative.

Although this comparison focuses on the 15 issue areas (described in Sections 4.1 through 4.15), determining an Environmentally Superior Alternative is difficult because of the many factors that must be balanced. Although this EIR identifies an Environmentally Superior Alternative, it is possible that the Commission could choose to balance the importance of each impact area differently and reach a different conclusion.

5.2 Evaluation of Project Alternatives

Three alternatives in addition to the No Project Alternative were identified for evaluation in this EIR. This section compares the potential environmental impacts for the Proposed Project and three alternatives. A detailed analysis of environmental impacts and mitigation for all project alternatives is provided in Sections 4.1 through 4.15. The following discussion is organized based on level of impacts as defined by CEQA, first by significant unmitigable (Class I) impacts, and secondly less than significant with mitigation (Class II) and less than significant with no mitigation required (Class III) impacts.

There would be significant unmitigable (Class I) impacts on agricultural and cultural resources under the Proposed Project and each alternative (Table 5-1) and significant unmitigable (Class I) impacts on biological resources under Alternative 3.

Significant unmitigable impacts on agricultural resources under the Proposed Project are identified as the permanent removal of 31.1 acres of Farmland (e.g., 16.1 acres of Prime Farmland, 0.7 acres of Farmland of Statewide Importance, 14.3 acres of Unique Farmland). Alternatives 2, 3, and 6 would also result in the permanent removal of prime, important or unique farmland, but the acreages vary by alternative (Table 5-1). Comparatively, the Proposed Project would result in the permanent removal of 31.1 acres of Farmland while Alternatives 2, 3, and 6 would result in the permanent removal of 23.9 acres, 16.7 acres, and 30.7 acres respectively. Based on this analysis, Alternative 3 would result in the least amount of impacts to agricultural resources; however, these effects would remain significant and unmitigable.

**TABLE 5-1
SUMMARY OF SIGNIFICANT UNMITIGABLE (CLASS I) ENVIRONMENTAL IMPACTS
OF THE PROPOSED PROJECT AND ALTERNATIVES**

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 31.1 acres of Farmland (e.g., 16.1 acres of Prime Farmland, 0.7 acres of Farmland of Statewide Importance, and 14.3 acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.9 acres of Farmland (e.g., 9.5 acres of Prime Farmland, 0.6 acres of Farmland of Statewide Importance, and 13.8 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 16.7 acres of Farmland (e.g., 6.6 acres of Prime Farmland, 0.9 acres of Farmland of Statewide Importance, and 9.2 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30.7 acres of Farmland (6.7 acres of Prime Farmland, 24.0 acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

Significant unmitigable (Class I) impacts on cultural resources under the Proposed Project are identified as impacts to elements of the Big Creek Hydroelectric System Historic District (i.e., the Rector Substation and the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission line towers). The same significant unmitigable impacts to the Big Creek Hydroelectric System Historic District would occur for all three alternatives.

In addition to the significant unmitigable impacts described above, there are several differentiating impacts that with mitigation would be less than significant. Table 5-2 provides a comparison of potential impacts by alternative for each resource category.

**TABLE 5-2
PROPOSED PROJECT VS. ALTERNATIVES
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS**

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Aesthetics	Impacts determined to be Class II and Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Agriculture Resources	Impacts determined to be significant unmitigable impacts to agricultural resources. Significant unmitigable impacts would include permanent removal of: <ul style="list-style-type: none"> • 16.1 acres of Prime Farmland; • 0.7 acres of Farmland of Statewide Importance; and • 14.3 acres of Unique Farmland. <p>TOTAL = 31.1 acres</p> <p>Less than significant impacts would include permanently removing 29 acres of Farmland that supports walnut orchards from production.</p> <p>Most impacts on agriculture</p>	Impacts would be similar to Proposed Project but to a lesser degree. Significant unmitigable impacts would include permanent removal of: <ul style="list-style-type: none"> • 9.5 acres of Prime Farmland; • 0.6 acres of Farmland of Statewide Importance; and • 13.8 acres of Unique Farmland. <p>TOTAL = 23.9 acres</p> <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>	Impacts would be similar to Proposed Project but to a lesser degree. Significant unmitigable impacts would include permanent removal of: <ul style="list-style-type: none"> • 6.6 acres of Prime Farmland; • 0.9 acres of Farmland of Statewide Importance; and • 9.2 acres of Unique Farmland. <p>TOTAL = 16.7 acres</p> <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p> <p>Least impacts on agriculture</p>	Impacts would be similar to Proposed Project but to a lesser degree. Significant unmitigable impacts would include permanent removal of: <ul style="list-style-type: none"> • 6.7 acres of Prime Farmland; • 24.0 acres of Farmland of Statewide Importance; and • 0 acres of Unique Farmland. <p>TOTAL = 30.7 acres</p> <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>
Air Quality	Impacts determined to be Class II and Class III. No Preference	Impacts would be similar to Proposed Project. No Preference	Impacts would be similar to Proposed Project. No Preference	Impacts would be similar to Proposed Project. No Preference
Biological Resources	Impacts determined to be Class II and Class III. No Preference	Impacts would be similar to Proposed Project. No Preference	Most impacts would be similar to Proposed Project; however, Alternative 3 would cause significant unmitigable impacts on northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve as well as to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. Most impacts on biological resources	Impacts would be similar to Proposed Project. No Preference

TABLE 5-2 (Continued)
PROPOSED PROJECT VS. ALTERNATIVES
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Cultural Resources	Would result in project specific and cumulatively significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District. No Preference	Would result in project specific and cumulatively significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District. No Preference	Would result in project specific and cumulatively significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District. No Preference	Would result in project specific and cumulatively significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District. No Preference
Geology, Soils, Seismicity and Mineral Resources	Impacts determined to be Class II and Class III No Preference	Impacts would be similar to Proposed Project. No Preference	Impacts would be similar to Proposed Project except, terrain is much steeper, which would increase the amount of road construction and earthwork necessary. No Preference	Impacts would be similar to Proposed Project. No Preference
Hazards and Hazardous Materials	Impacts determined to be Class II and III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Hydrology and Water Quality	Impacts determined to be Class II and Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Land Use, Planning, and Policies	Consistent with land use policies and plans; impacts determined to be Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Noise	Impacts determined to be Class II and III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Population and Housing	Impacts determined to be Class III. One residential housing unit would be displaced. No preference	Impacts would be similar to the Proposed Project except no residential units would be displaced. No preference	Impacts would be similar to the Proposed Project except no residential units would be displaced. No preference	Impacts would be similar to the Proposed Project except no residential units would be displaced. No preference

TABLE 5-2 (Continued)
PROPOSED PROJECT VS. ALTERNATIVES
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Public Services	Impacts determined to be Class II and Class III. No preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Recreation	Impacts determined to be Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Transportation and Traffic	Impacts determined to be Class II and Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference
Utilities and Service Systems	Impacts determined to be Class III. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference	Impacts would be similar to the Proposed Project. No Preference

5.3 Environmentally Superior Alternative

As discussed in the previous section, the Proposed Project and all three alternatives would have significant unmitigable impacts on agricultural and cultural resources. Additionally, Alternative 3 would have significant unmitigable impacts on biological resources. The extent of the unmitigable impacts on agricultural resources varies slightly by alternative but could not be mitigated to less than significant levels for the Proposed Project or any alternative. Consequently, the selection of an environmentally superior alternative is based on differences in intensity and type of significant impacts (Table 5-2). Based on these differences the identified environmentally superior alternative is Alternative 2

All three alternatives studied in this EIR were variations of alignments that would use varying amounts of existing ROW and establish new ROW where no transmission line currently exists. For a number of resources there are no material environmental impact differences between the Proposed Project and alternatives including: aesthetics; air quality; geology, soils, seismicity and mineral resources; hazards and hazardous materials; hydrology and water quality; land use, planning, and policies; noise; population and housing; public services; recreation; transportation and traffic; and utilities and service systems.

Implementation of the Proposed Project and all three alternatives would result in a significant unmitigable (Class I) impact on cultural resources (i.e., the Big Creek Hydroelectric System Historic District). Although impacts to the Historic District would be of varying degrees (i.e., Alternative 3 would impact more features associated with the Historic District than the Proposed Project), the majority of the Historic District would remain intact; therefore, impacts of varying degree between alternatives is not material enough to determine a preferred alternative from a cultural resources perspective.

Resource categories where environmental impacts would either be materially lessened or increased by implementing an alternative to the Proposed Project are discussed below.

- **Agricultural Resources** – Impacts would be significant and unmitigable for all alternatives. Compared to the Proposed Project, Alternative 3 would permanently remove the least amount of Farmland, followed by Alternative 2 and then Alternative 6. All three alternatives would remove approximately one-half the acreage of walnut orchards that would be removed from production under the Proposed Project.
- **Biological Resources** – Impacts would be significant and unmitigable for Alternative 3.

While Alternative 3 would result in the least impacts on agricultural resources, due to its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. The EIR team looked for a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological Reserve; however, a bypass was not feasible due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the Reserve. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided through rerouting, Alternative 2 is the Environmentally Superior Alternative.

5.4 No Project Alternative vs. the Environmentally Superior Alternative

5.4.1 Summary of the No Project Alternative and Its Impacts

The No Project Alternative is described in Section 3.4.4. Under the No Project alternative, the Proposed Project would not be built and would therefore have no environmental impacts related to project construction and maintenance. However, from an operational perspective, demand for electricity in the Electrical Needs Area would not be adequately met, and the unequal distribution of load would continue to result in overloads on the 220 kV lines serving Rector Substation from the Big Creek Hydroelectric Project. This condition would continue to jeopardize SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area, creating the potential for increased incidence of brown-outs and black-outs in the future. Such disruptions to electric service could result in indirect impacts to the provision of public services.

5.4.2 Summary of the Environmentally Superior Alternative and Its Impacts

The Environmentally Superior Alternative is defined in Section 5.3 as Alternative 2. Impacts of Alternative 2 are defined in each resource area's impact analysis in Sections 4.1 through 4.15, and are also summarized in Table 5-2, above. The Environmentally Superior Alternative would have two significant unmitigable (Class I) impacts on agricultural resources and one significant unmitigable impact on cultural resources. Impacts on agricultural resources would include permanent removal of 23.9 acres of Farmland (e.g., 9.5 acres of Prime Farmland, 0.6 acres of Farmland of Statewide Importance, and 13.8 acres of Unique Farmland) and conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive. Impacts on cultural resources would be to elements of the Big Creek Hydroelectric System Historic District. As discussed in Sections 4.1 through 4.15, other types of impacts would also occur under Alternative 2, but they would be either less than significant or mitigable to less than significant levels.

5.4.3 Conclusion: Comparison of the Environmentally Superior Alternative with the No Project Alternative

The Environmentally Superior Alternative (Alternative 2) would avoid significant impacts on biological resources and would have minimal long-term impacts on residences or other sensitive land uses. The most significant impact of the No Project Alternative is that SCE's ability to provide safe and reliable electric service to customers within the Electrical Needs Area would be jeopardized, creating the potential for increased incidence of brown-outs and black-outs in the future which could in turn result in indirect impacts to the provision of public services. Overall, the Environmentally Superior Alternative is preferred over the No Project Alternative, as the No Project Alternative would not meet the basic project objectives.

CHAPTER 6

CEQA Statutory Sections

6.1 Growth-Inducing Effects

CEQA requires a discussion of the ways in which a project could induce growth. Section 15126.2(d) of the CEQA Guidelines, identifies a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees hired for proposed commercial and industrial development projects and population growth resulting from residential development projects represent direct forms of growth. Other examples of projects that are growth-inducing are the expansion of urban services into a previously unserved or under-served area, the creation or extension of transportation links, or the removal of major obstacles to growth. It is important to note that these direct forms of growth have secondary effects of expanding the size of local markets and attracting additional economic activity to the area.

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

6.1.1 Growth Caused by Direct and Indirect Employment

The total number of construction crew members for the Proposed Project is estimated to be approximately 50 crew members. However, it is expected that 60 to 80 percent of the craft personnel would be from the contractor's pool of experienced personnel, with the remaining construction personnel coming from local sources. The Proposed Project construction activities would be temporary, estimated to be approximately nine to 12 months. Project operation and maintenance requires minimal staffing which would be handled by current SCE employees; therefore, no new jobs would be created.

Some of the construction personnel may commute from outside of the project area and stay at existing local hotels during construction. There is an adequate supply of hotels and motels in the project area that could be utilized by the out-of-town personnel. Therefore, no growth in residential services would occur. Over the long term, the Proposed Project would have no impact on population growth, as no long-term growth employment would result from project operations and maintenance.

6.1.2 Growth Related to Provision of Additional Electric Power

Construction of the Proposed Project is needed to meet electric system reliability and planned demand in the southeastern portion of the San Joaquin Valley. Therefore, the Proposed Project is designed to increase reliability and accommodate existing and planned electrical load growth, rather than to induce growth.

Growth in the southeastern portion of the San Joaquin Valley is planned and regulated by applicable local planning policies and zoning ordinances. The provision of electricity is generally not considered an obstacle to growth nor does the availability of electrical capacity by itself normally ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth. Therefore, the Proposed Project would not indirectly induce growth by creating new opportunities for local industry or commerce.

6.2 Significant Environmental Effects that Cannot be Avoided

Sections 15126.2(b) of the CEQA Guidelines requires that an EIR identify significant environmental effects which cannot be avoided by the Proposed Project including those that can be mitigated, but not to a less than significant level. The Proposed Project would result in impacts to Agricultural Resources and Cultural Resources, that even with implementation of mitigation measures, would remain significant unmitigable. The Proposed Project would result in: permanent removal of 31.1 acres of Farmland (e.g., 16.1 acres of Prime Farmland, 0.7 acres of Farmland of Statewide Importance, and 14.3 acres of Unique Farmland); conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive; and alterations to elements of the Big Creek Hydroelectric System Historic District. As discussed in Chapter 3, *Alternatives and Cumulative Projects*, a number of alternatives were analyzed to determine if they could meet the most basic project objectives (i.e., substantially improve power flow capabilities; and substantially improve system strength) while avoiding or minimizing the significant impacts associated with the Proposed Project. While several routing configurations were shown to help alleviate the power flow constraint, only loop configurations (i.e., looping the under-utilized Big Creek-Springville 220 kV lines into the Rector Substation) would also result in a meaningful improvement in system strength. Further, the electrical effectiveness of different loop alignments was shown to be nearly identical for tap points located north of the Rector Substation, whereas electrical effectiveness decreased substantially for tap points located south of the Rector Substation. No alternatives were identified that would meet the most basic project objectives while reducing impacts associated with the Proposed Project to a mitigable level. Accordingly, impacts to agricultural resources and elements of the Big Creek Hydroelectric System Historic District could not be alleviated through development of alternatives.

6.3 Significant Irreversible Changes

Sections 15126.2(c) of the CEQA Guidelines requires that an EIR identify significant irreversible environmental changes that would be caused by the Proposed Project. These changes may include, for example, uses of nonrenewable resources, or provision of access to previously inaccessible areas, as well as project accidents that could change the environment in the long-term. Development of the Proposed Project would require a permanent commitment of natural resources resulting from the direct consumption of fossil fuels, construction materials, the manufacture of new equipment that largely cannot be recycled at the end of the project's useful lifetime, and energy required for the production of materials. Furthermore, construction of the Proposed Project would necessitate the permanent removal of 31.1 acres of Farmland and conversion of an additional 29 acres of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive. As evaluated in Section 4.1, *Agricultural Resources*, with implementation of the mitigation measures recommended in this EIR, permanent loss of agricultural resources would remain significant and unmitigable. Moreover, the Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District. As evaluated in Section 4.5, *Cultural Resources*, with implementation of the mitigation measures recommended in this EIR, permanent loss of cultural resources would remain significant and unmitigable. Construction of the Proposed Project would also result in loss of nominal grassland habitat from pole/tower bases and access roads as well as loss of agricultural lands which provide secondary habitat that support special status species. However, as evaluated in Section 4.4, *Biological Resources*, while the Proposed Project would impact biological resources, because this impact would be nominal and confined to small areas, it would remain less than significant.

During the project's operational phase, the transmission line would allow for the efficient transport of additional electrical power generated from renewable and non-renewable resources. However, the Proposed Project would not require the future use of specific amounts of non-renewable resources.

6.4 Cumulative Impacts

This section present the analysis of the potential for the Proposed Project to create cumulative effects when the impacts of projects listed in Table 3-11 are considered together with the impacts of the Proposed Project.

6.4.1 Aesthetics

The geographic scope of the cumulative impacts to visual quality is the viewsheds that could be affected by the Proposed Project from public roadways, trails, open space, and residential areas. Viewsheds of the project vicinity are extensive, given the extensiveness of the landscapes traversed, general lack of vegetative screening, and moderate number of people who reside in northwestern Tulare County.

Mitigation measures identified in this EIR would ensure that the Proposed Project would not result in significant individual effects on visual resources. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, includes numerous major development projects in northwestern Tulare County that could substantially alter the visual character of areas within the project vicinity. Many of these projects would have the potential to create new visual impacts within the viewsheds that could be affected by the Proposed Project from public roadways, trails, open space, and residential areas. However, the projects would generally be located in urbanized, developed areas and would therefore not be likely to affect the area's visual character. Additionally, future development within the project vicinity is guided by the applicable city and county General Plans, and associated planning and environmental documents. Furthermore, new development would be subject to the applicable city and county design review process.

The Proposed Project would add new or upgraded electrical infrastructure to the overall visual setting of the project area. The Proposed Project would contribute to cumulative adverse influences where aboveground facilities or evidence of underground facilities (e.g., cleared ROWs) occupy the same field of view as other built facilities or impacted landscapes that are currently in the viewsheds of sensitive viewers in the project area. Existing utility infrastructure including transmission lines and substations, have compromised the existing visual setting in the project vicinity. However, the Proposed Project, along with the past, present, and reasonably foreseeable projects, would not create a cumulatively significant effect because it would not dominate the landscape setting.

When considered with the existing visual setting, the Proposed Project's contribution would not be cumulatively considerable because it would not significantly alter existing scenic quality or viewsheds (Class II).

6.4.2 Agriculture Resources

Agricultural uses, including hundreds of dairies and thousands of acres of citrus and walnut groves, still dominate Tulare County's landscape; however, the County has seen a reduction in agricultural land due to urbanization. In 2006 (most recent inventory), the total acreage of Farmland in Tulare County was 736,494 acres. There has been a reduction of 12,355 acres of Farmland for Tulare County between 2004 and 2006 (FMMP, 2008).

As a number of the projects discussed in Section 3.6, *Cumulative Projects*, are not yet in the environmental planning stage, the acreage of Farmland that could be converted by these projects is not known. However, in general, the acreage of Farmland in Tulare County is expected to decline. The Proposed Project would contribute incrementally to this decline.

Implementation of mitigation measures to preserve soil structure, minimize impacts during growing season, supply replacement crops upon completion of construction, obtain conservation easements, and protect existing irrigation and drainage systems would minimize impacts under the Proposed Project; however, those measures would not reduce impacts related to the permanent reduction of agricultural lands to less than significant levels. Therefore, the

incremental contribution of Farmland conversion associated with the Proposed Project would be a cumulatively considerable contribution to an existing significant cumulative impact. This impact would be significant unmitigable (Class I).

6.4.3 Air Quality

Emissions of ozone precursors, PM10, and PM2.5 during construction activities could result in a significant cumulative impact when considered with other projects being constructed in the San Joaquin Valley Air Basin (SJVAB). However, implementation of mitigation measures requiring SCE to implement dust control measures and to submit an Air Impact Assessment to the San Joaquin Valley Air Pollution Control District (SJVAPCD) demonstrating how construction exhaust emissions would be controlled would reduce the Proposed Project's individual contribution to cumulative air quality impacts from construction activities to a less than cumulatively considerable level (Class II). Because the SJVAB is designated as either non-attainment or unclassified related to the other criteria pollutants, Proposed Project construction emissions of these pollutants would not be cumulatively considerable and the associated cumulative impacts would be less than significant (Class III).

Ozone precursor, PM10, PM2.5, CO, and SO₂ emissions from operation and maintenance activities would be unlikely to contribute substantially to a cumulatively considerable impact. Therefore cumulative impacts associated with operation of the Proposed Project would be less than significant (Class III). Additionally, implementation of mitigation measures requiring SCE to utilize dust control measures on permanently disturbed land and new access and spur roads would help ensure that impacts from operation and maintenance activities would be less than significant.

Significance of greenhouse gas (GHG) emissions are determined based on whether they would have a cumulatively considerable impact on global climate change. The Proposed Project would not result in generation of more than 7,000 metric tons per year, and would therefore not conflict with the State's GHG reduction goals. Furthermore, during operation, the Proposed Project would actually reduce operational emissions by approximately 39.5 metric tons of CO₂e per year by replacing older leakier circuit breakers with newer more efficient circuit breakers. Moreover, indirect impacts from tree removal and disposal could be cumulatively considerable when considered with tree removal from other reasonable foreseeable projects. However, with implementation of mitigation requiring SCE to dispose of trees via Tulare County's Wood and Green Waste Program and to fund and implement a tree replacement program, the Proposed Project's contribution to global climate change would not be cumulatively considerable (Class II).

6.4.4 Biological Resources

The geographical context includes urban, agricultural and open space land uses in northwestern Tulare County that support common and sensitive biological resources.

Construction of the Proposed Project could result in both temporary impacts on special-status species (i.e., Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt

grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur, spiny-sepaled button celery, valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk and golden eagle) and their habitat. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to the incremental loss of undeveloped natural lands that provide habitat for these special-status species. Past, present and reasonably foreseeable projects are also required to comply with federal and State regulations protecting special-status species through implementation of mitigation measures during construction. Activities associated with the construction of the Proposed Project would cause relatively minor loss of undeveloped grassland habitat in the area, principally for the footprint of individual transmission towers/poles where they occur in non-agricultural lands, and for access roads where needed, that would traverse native habitat. SCE would be required to conduct surveys and to avoid, minimize and mitigate for potential impacts to special-status species and their habitat, which would reduce the cumulative contribution of the Proposed Project to less than significant (Class II).

Construction of the Proposed Project could also impact riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. It is anticipated that ongoing and future development projects as described in Section 3.6, *Cumulative Projects*, would contribute to impacts to such features. As with special-status species, past, present and reasonably foreseeable projects are required to comply with federal and State regulations protecting riparian habitat and jurisdictional waters. It is anticipated that impacts to riparian habitat and jurisdictional waters would be avoided by the Proposed Project. However, a jurisdictional determination has not been made for features within the project area therefore there is the potential for impact. The potential project impacts in combination with other projects could contribute to a cumulatively significant impact on riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. SCE would be required to perform a wetland delineation and have it verified by the USACE if there is a potential to impact jurisdictional features. Additionally, they would be required to avoid, minimize or mitigate potential impacts. For riparian habitat, SCE would be required to avoid, minimize or mitigate potential impacts. As noted above, it is anticipated that impacts from construction of the Proposed Project to riparian habitat and jurisdictional waters would be avoided or minimal; therefore, in combination with other projects as described in Section 3.6, *Cumulative Projects*, the Proposed Project would not contribute to a cumulatively significant impact on riparian habitat, including native oak trees as well as jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetland (Class II).

The portion of the project area that is within the City of Visalia contains valley oak and/or protected landmark trees. There is the potential for ongoing and future development projects in the City to impact valley oak and/or protected landmark trees. These projects are generally residential subdivisions that may require vegetation removal and/or grading. Permits to remove valley oak and/or protected landmark trees in order to construct such subdivisions would be required from the City. The potential construction impacts of the Proposed Project, in combination with other projects in the City, could contribute to a cumulatively significant impact

on valley oak and/or protected landmark trees. SCE would be required to implement Best Management Practices to minimize damage to such trees including, but not limited to, replacement at a 5:1 ratio, which would reduce the cumulative contribution of the Proposed Project to valley oak and/or protected landmark trees to less than significant (Class II).

The project area consists of urban, agricultural and open space that provide habitat for nesting migratory birds and raptors. There is the potential for ongoing and future development projects, mainly residential subdivisions and road widening, to impact nesting birds during construction. Moreover, residential developments would be supported by power infrastructure consisting of distribution voltage (i.e., less than 50 kV); however, distribution lines for new residential developments are generally required to be installed underground (SCE, 1998); therefore, there would be no additional potential for electrocution or collision of raptors from power infrastructure associated with the residential development projects. The potential construction impacts, in combination with other projects, could contribute to a cumulatively significant impact on nesting birds; however, there is no potential cumulative operational impact related to electrocution or collision of raptors with power infrastructure. SCE would be required to conduct preconstruction surveys and avoid active nests with a suitable buffer. Therefore, with the implementation of this measure, the Proposed Project would not have a cumulatively considerable contribution to impacts on nesting birds (Class II).

6.4.5 Cultural Resources

The Proposed Project would add to the cumulative impacts on cultural resources in the Southern San Joaquin Valley.

Activities associated with the construction and operation of the Proposed Project would significantly alter the Big Creek Hydroelectric System Historic District (BCHSHD), which would result in a significant unmitigable impact to historic resources. Impacts to other historic resources, including historic landscapes, archaeological, and paleontological resources, would be less than significant with mitigation.

The project area contains a significant archaeological and historical record that, in many cases, has not been well documented or recorded. Thus, there is the potential for ongoing and future development projects in the vicinity, particularly in and around the cities of Visalia and Farmersville, to disturb landscapes that may contain known or unknown cultural resources. The historic agricultural landscape could be particularly affected in these areas. Environmental analysis is either underway or completed for many of these projects and several are presently under construction.

The potential construction impacts of the Proposed Project, in combination with other projects in the area, could contribute to a cumulatively significant impact on cultural resources. However, implementation of mitigation measures to reduce impacts to cultural resources including the creation of a Historic Properties Treatment Plan, further archaeological and historic resources surveys, further paleontological study, and provisions for the accidental discovery of cultural resources would reduce potential impacts from construction of the Proposed Project. Future

projects with potentially significant impacts to cultural resources would be required to comply with federal, State, and local regulations and ordinances protecting cultural resources through implementation of similar mitigation measures during construction. Therefore, with implementation of mitigation measures described above, the Proposed Project would not have a cumulatively considerable contribution to impacts to archaeological and paleontological resources (Class II).

When considered in combination with other future projects, the Proposed Project's incremental contribution to impacts to the BCHSHD (i.e., the Rector Substation and the Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines), even with proposed mitigation, would be considered significant unmitigable (Class I). The Proposed Project's incremental contribution to other known and unknown historic resources in the project area would not be cumulatively considerable, because impacts would be mitigated to a less than significant level through documentation and avoidance of historically-significant resources (Class II). Finally, the Proposed Project's incremental impact to the historic agricultural landscape of the Southern San Joaquin Valley by permanently removing 14.9 acres of citrus trees would be an imperceptible change to the character-defining feature of the area, and the Proposed Project would not alter other character-defining features of the agricultural landscape, such as transportation infrastructure, water infrastructure, or historically-significant agricultural buildings and structures. Consequently, the Proposed Project would not result in a cumulatively considerable impact to the historic agricultural landscape of the Southern San Joaquin Valley (Class III).

6.4.6 Geology, Soils, Seismicity and Mineral Resources

Impacts on geology and soils are generally localized and do not result in regionally cumulative impacts. Geologic conditions can vary significantly over short distances creating entirely different effects elsewhere. Other future development would be constructed to the then-current standards, which could potentially exceed those of existing improvements within the region, which reduces the potential impacts to the public.

The impact of the Proposed Project on geology, soils, and mineral resources would be localized and incrementally less than significant. Therefore, the Proposed Project would not affect the immediate vicinity surrounding the project area. As discussed in Section 3.6, *Cumulative Projects*, there are no projects within the immediate vicinity of the Proposed Project. Moreover, the Proposed Project would all be constructed in accordance with the most recent version of the CBC seismic safety requirements and recommendations contained in the Proposed Project's specific geotechnical reports. Therefore, incremental impacts to area geology and soils resulting from construction, operation and maintenance of the Proposed Project would not contribute to a cumulatively considerable impact (Class II).

6.4.7 Hazards and Hazardous Materials

The Proposed Project would increase the hazard potential in the project area. However, it is unlikely that the Proposed Project, combined with the other projects listed in Section 3.6, *Cumulative Projects*, would contribute to a significant cumulative hazards or hazardous materials

related impact because impacts related to hazards and hazardous materials are generally site specific. Therefore, cumulative impacts would only be likely occur with other projects that are constructed within the immediate vicinity of the Proposed Project.

Only three of the cumulative projects identified in Section 3.6, *Cumulative Projects*, would be within the immediate vicinity of the Proposed Project, including two road widening projects and a specific plan. These types of projects, combined with the Proposed Project, would not result in a cumulative impact even if all of the projects were to be constructed simultaneously. In addition, proposed mitigation measures would ensure that the Proposed Project's contribution to construction-related hazards and hazardous materials cumulative impacts would be less than cumulatively considerable (i.e., because the Proposed Project's contribution to any potential cumulative impact would be site specific and would be mitigated). Therefore, cumulative impacts related to hazards and hazardous materials would be less than significant (Class II).

6.4.8 Hydrology and Water Quality

The geographic context for the cumulative impacts associated with hydrology and water quality is the Kaweah River watershed downstream (or west) of Terminus Dam.

The Proposed Project, along with the past, present, and reasonably foreseeable future projects in the area identified in Section 3.6, *Cumulative Projects*, would be required to comply with applicable federal, State, and local water quality regulations. This project, along with other projects involving similar general construction activities, would be required to obtain coverage under the General Permit, Section 401 (of the Clean Water Act) water quality certification, and/or Waste Discharge Requirements (WDR). Storm water management measures would be required to be identified and implemented that would effectively control erosion and sedimentation and other construction related pollutants during construction. Other management measures, such as construction of infiltration/detention basins, would be required to be identified and implemented that would effectively treat pollutants that would be expected for the post-construction land use for certain projects. Construction and operational related stormwater runoff from this project would be controlled by the requirements of an National Pollutant Discharge Elimination System (NPDES) permit (e.g., General Permit), WDR measures, and mitigation measures required as part of this EIR. Other new development in the area would also be required to control construction and operational stormwater by implementing State and local requirements regarding hydrology and water quality, as well as by requirements introduced through CEQA review where applicable. Furthermore, with mitigation measures requiring SCE to implement erosion control measures and water quality control measures, the Proposed Project's contribution to hydrologic resources and water quality impacts would be less than cumulatively considerable (Class II).

6.4.9 Land Use and Planning

The geographic context for the cumulative impacts associated with land use issues are the cities and unincorporated communities of western Tulare County.

As noted in Section 3.6, *Cumulative Projects*, a number of projects are planned within the project area and would have the potential to be constructed simultaneously with the Proposed Project. All potential Proposed Project land use impacts resulting from temporary construction activities, including temporary increases in noise and dust, decreased air quality from construction vehicles, odors from construction equipment, safety issues, loss of vegetation, and access issues, are analyzed in the corresponding sections of this EIR (see Sections 4.1, *Aesthetics*; 4.3, *Air Quality*; 4.4, *Biological Resources*; 4.10, *Noise*; and 4.14, *Transportation and Traffic*). From an operations and maintenance perspective, there would be no cumulatively considerable impacts because the projects discussed in Section 3.6, *Cumulative Projects*, are representative of the ongoing level of development in the region, would be located in areas away from the Proposed Project's area of impact, and would not affect the same lands. Therefore, implementation of the Proposed Project would not result in a cumulatively considerable contribution to land use and planning impacts (Class III).

6.4.10 Noise

Noise levels tend to lessen quickly with distance from a source; therefore, the geographic scope for cumulative impacts associated with noise would be limited to projects located within one mile of the Proposed Project.

Construction of the Proposed Project would result in a potentially significant impact associated with construction equipment and blasting noise and vibrations; however, this impact would be reduced to less than significant with mitigation. Operation and maintenance activities associated with the Proposed Project would not result in permanent increases to existing noise levels and impacts would be less than significant.

As discussed in Section 3.6, *Cumulative Projects*, there are a number of projects located within one mile of the Proposed Project that are reasonably foreseeable and would have the potential to be constructed simultaneously with the Proposed Project. Examples of such projects include the State Route 65 road widening and resurfacing as well as a number of proposed and approved residential subdivisions in the City of Visalia and the City of Farmersville. If construction of any of these projects were to occur simultaneously with construction of the Proposed Project, the potential for impacts to nearby receptors from construction noise would increase. However, the human ear perceives noise in a logarithmic fashion rather than a linear fashion. Therefore if a new noise source is introduced near an existing source and the two produce equal noise levels, the ambient noise level would increase by approximately three dB rather than doubling. Based on this information, even if the Proposed Project would be constructed simultaneously with another project in the immediate vicinity, substantial increases in noise levels at nearby receptors would not be expected to occur.

Therefore, when considered in combination with these projects, the Proposed Project's incremental contribution to temporary noise impacts from construction, with proposed mitigation, would not be cumulatively considerable. Furthermore, the main noise source from operation of the Proposed Project would be corona discharge; however, corona discharge would not substantially increase ambient noise levels and would therefore not result in a cumulatively

considerable contribution to noise impacts. Moreover, maintenance activities would include infrequent inspection of the lines and would also not result in a cumulatively considerable contribution to noise impacts. Therefore, construction, operation and maintenance of the Proposed Project would not result in a cumulatively considerable impact (Class II).

6.4.11 Population and Housing

The geographic context for the cumulative impacts associated with population and housing issues are the cities and unincorporated communities of western Tulare County, which assumes full build-out of the Proposed Project, in combination with build-out of the projects listed in Section 3.6, *Cumulative Projects*. Tulare County is expected to undergo substantial growth over the next two decades. By 2025, the population of Tulare County is expected increase over 53 percent from 2005 levels to 629,252 persons (TCAG, 2008a). The projects listed in Section 3.6, *Cumulative Projects*, include numerous phased subdivisions for single- and multi-family residences, as well as the Yokohl Ranch Project, a master planned community that would include phased development of 10,000 residential units, approximately 550,000 square feet of mixed use commercial space, public/quasi public areas, and infrastructure such as roads and utilities. These projects, as well as other future development, would be subject to the applicable city and/or County planning process, as well as environmental review on a project-by-project basis. As such, build-out of the projects listed in Section 3.6, *Cumulative Projects* would not be likely to result in the inducement of substantial direct or indirect population growth in the area beyond what is planned. Furthermore, the Proposed Project is designed to increase reliability and accommodate existing and planned electrical load growth, rather than to induce growth. Therefore, the Proposed Project represents no incremental contribution to a potential growth impact and would not result in a cumulatively considerable impact in regards to population and housing (Class III).

6.4.12 Public Services

The geographic scope of this impact is the service area of affected public services, generally limited to within the northwestern portion of Tulare County and the cities of Visalia and Farmersville.

The Proposed Project would not result in significant effects on the ability of service providers to provide adequate police services, fire protection and emergency medical services, and public school facilities to the project area. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several large development projects planned in the vicinity of the Proposed Project that may impact public services. These projects include numerous new housing subdivisions and the Yokohl Ranch Project – a master planned community of 10,000 residential units, 550,000 square feet of mixed use space, and infrastructure including roads and utilities. It is likely that this cumulative development would require expansion of existing, or development of new, public service infrastructure to support the planned population growth. If this growth were to occur prior to improvements in public service infrastructure, then there could be significant adverse effects on fire protection and emergency medical services, police protection, schools and other public facilities. However, the Proposed Project's impacts to public services would generally be limited to the construction period of nine to 12 months, after which the Proposed Project's demand on public services would be inconsequential. Additionally, mitigation

measures in this EIR including coordination with emergency service providers, precautionary measures to prevent vandalism, and implementation of traffic control and public safety measures would ensure that the Proposed Project's temporary public service impacts during construction would be negligible. Therefore, the effect of the Proposed Project on public services, in combination with other past, present and reasonably foreseeable projects, would not be cumulatively considerable (Class II).

6.4.13 Recreation

The geographic scope of this impact is the regional recreational facilities in the project area, generally located within western Tulare County and the cities of Visalia and Farmersville.

Implementation of the Proposed Project would have no impact on the environment from construction or expansion of additional recreational facilities, and so would not have any contribution to cumulative impacts there from.

With regard to increased use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated, impacts from the Proposed Project would occur only during the nine to 12-month construction period and even then would be inconsequential. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several development projects in Tulare County that could increase the demand on existing and/or result in the need for new recreational facilities within the project vicinity by significantly increasing the population in the project area. These projects include the Yokohl Ranch Project as well as numerous subdivisions and planned developments approved for construction. However, because the Proposed Project would have no incremental demand on existing recreational facilities once construction is complete, it would not contribute to the cumulative demand from the other planned development projects.

Therefore, the Proposed Project would not contribute to cumulative long-term impacts on recreation (Class III).

6.4.14 Transportation and Traffic

The geographic context for the cumulative impacts associated with transportation and traffic issues is primarily limited to the areas where transportation facilities (e.g., roads, railroads, etc) would be crossed during conductor stringing activities.

Proposed Project construction activities, as described in Chapter 2, *Project Description*, could have a temporary construction-related impact on local traffic flow in the Proposed Project area as street and lane closures may be required. In conjunction with other construction projects identified in Section 3.6, *Cumulative Projects*, potential cumulative impacts could occur. For example, the County of Tulare has proposed to widen Farmersville Boulevard in the general vicinity of the area associated with the Proposed Project. Caltrans has likewise identified improvements to SR 65 within the Proposed Project area. Two other Caltrans projects (i.e., SR 198 and Millwood Road) are located within the alternative project areas. If any of these projects were to occur at the same time, a

cumulative traffic impact could result at certain access locations to the Proposed Project. However, mitigation measures identified in this EIR require SCE to prepare a Traffic Management Plan prior to construction and to coordinate with appropriate agencies to minimize the cumulative effect of simultaneous construction activities.

In addition to cumulative construction impacts, cumulative operational impacts could occur. For example, Caltrans plans to widen SR 65 to a four-lane expressway from Hermosa Avenue to SR 198. Because the Proposed Project would result in a new transmission line crossing of this segment of SR 65, the potential exists that one of the new towers could be placed too close to SR 65, potentially resulting in a conflict with the road widening project. However, as mitigation, SCE would be required to coordinate with appropriate agencies, including Caltrans, to minimize the cumulative effect of simultaneous construction activities in overlapping areas, which would ensure that SCE would coordinate with Caltrans regarding the Proposed Project and its projects to avoid potential conflicts.

Mitigation measures identified in this EIR would ensure that the Proposed Project's contribution to transportation and traffic-related cumulative impacts during construction would not be cumulatively considerable. During operation, maintenance activities would not increase above existing levels that are employed to maintain the existing transmission line ROWs, and the increase in traffic due to new ROW transmission line corridor maintenance would be inconsequential. Impacts would therefore be mitigated to less than significant (Class II).

6.4.15 Utilities and Services Systems

The geographic scope of this impact is services areas in the project area for Tulare County, the cities of Visalia and Farmersville.

Construction, operation, and maintenance activities associated with the Proposed Project would not result in significant impacts that would affect the ability of Tulare County, the cities of Visalia and Farmersville, and other service providers to effectively deliver public water supply, sanitary sewer (wastewater), solid waste, and other utility services in the study area. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, include several development projects planned in the vicinity of the project area that may impact utility services. These include numerous new housing subdivisions and the Yokohl Ranch Project – a master planned community of 10,000 residential units, 550,000 square feet of mixed use space, and infrastructure such as roads and utilities. It is likely that this cumulative development would require expansion of existing, or development of new, utility service infrastructure to support the planned population growth. However, these planned developments would be required to comply with all federal, State, and local regulations and ordinances protecting utility services, including complying with all standards of Title 24 of the California Code of Regulations, as well as water conservation measures and waste minimization efforts in accordance with Tulare County and cities of Visalia and Farmersville requirement. Further, because the Proposed Project demand for utility services would occur only during the construction period which would be completed well prior to completion of most of the planned residential development projects, the Proposed Project would have no cumulatively considerable impacts related to utilities and service systems (Class III).

SECTION 7

Report Preparers

7.1 Report Authors

7.1.1 Lead Agency

California Public Utilities Commission

Energy Division
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Mr. Jensen Uchida	CPUC Project Manager
Mr. Jason Reiger	CPUC Attorney

7.1.2 Consultants

Prime Consultant

ESA

225 Bush Street, Suite 1700
San Francisco, California 94104

Douglas Cover, QEP	Project Manager, Executive Summary, MMRC
Jennifer Johnson, JD	Deputy Project Manager, Introduction, Executive Summary, CEQA Statutory Sections, MMRC
Rachel Baudler	Aesthetics
Madeline Bray	Cultural Resources
Claire Early	Agricultural Resources, Land Use and Planning, Population and Housing, Public Services & Recreation, Utilities and Service Systems
Matt Fagundes	Air Quality, Hazards and Hazardous Materials, Noise
Ron Foster	Transportation and Traffic
Justin Gragg	Hydrology and Water Quality
Joseph Henry	Biological Resources
Peter Hudson, PG	Hydrology and Water Quality
Mike Manka	Project Description, Alternatives Analysis
Mitch Marken, PhD	Cultural Resources
Tom Roberts, CWB	Biological Resources
Ray Weiss	Agricultural Resources, Land Use and Planning
Nichole Yeto	Air Quality, Noise

Subconsultants

Ninyo & Moore

5710 Ruffin Road
San Diego, California 92123
Greg Farrand & Randal L. Irwin, P.G., C.E.G.

Geology, Soils and Seismicity

Scheuerman Consulting

3915 Rawhide Road
Rocklin Ca. 95677
Paul G. Scheuerman, P.E.

Alternatives Analysis

Larry L. Harrison

209 Matsqui Road
Antioch, CA 94509
Larry L. Harrison, P.E.

Alternatives Analysis

CHAPTER 8

Mitigation Monitoring, Reporting and Compliance Program

This page left intentionally blank

PUBLIC UTILITIES COMMISSION505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

**MITIGATION MONITORING,
REPORTING AND COMPLIANCE PROGRAM**

**SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT
(APPLICATION NO. A.08-05-039)****INTRODUCTION**

This document describes the mitigation monitoring, reporting and compliance program (MMRCP) for ensuring the effective implementation of the mitigation measures required for the California Public Utilities Commission (CPUC, or Commission) approval of the Southern California Edison's (SCE) application to construct, operate and maintain the Proposed Project. All mitigations are presented in Table 8-1 provided at the end of this MMRCP.

If the Proposed Project is approved, this MMRCP would serve as a self-contained general reference for the Mitigation Monitoring Program adopted by the Commission for the project. If and when the Proposed Project has been approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final Environmental Impact Report (EIR), as adopted.

California Public Utilities Commission – MMRCP Authority

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a MMRCP when it approves a project that is subject to preparation of an EIR and where the EIR for the project identifies potentially significant environmental effects. California Environmental Quality Act (CEQA) Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting.

The purpose of a MMRCP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMRCP as a working guide to facilitate not only

the implementation of mitigation measures by the project proponent, but also the monitoring, compliance and reporting activities of the CPUC and any monitors it may designate.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on SCE's applications. If the Commission approves the applications, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made a condition of approval by the Commission.

Because the CPUC must decide whether or not to approve the SCE application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, CEQA requires the CPUC to consider the potential environmental impacts that could occur as the result of its decisions and to consider mitigation for any identified significant environmental impacts.

If the CPUC approves SCE's application for authority to construct and operate the transmission line and modify its substations, SCE would be responsible for implementation of any mitigation measures governing both construction and future operation of the transmission line and substations. Though other state and local agencies would have permit and approval authority over construction of the transmission line, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by this EIR. All approvals and permits obtained by SCE would be submitted to the CPUC for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

In accordance with CEQA, the CPUC reviewed the impacts that would result from approval of the application. The activities considered include the construction of the upgraded and new transmission lines and modification of the Rector, Vestal, Springville, and Big Creek Substations, and the future operation of the transmission line. The CPUC review concluded that implementation of the Proposed Project could result in significant unmitigable impacts to Agricultural and Cultural Resources. All other potential impacts could be mitigated to less than significant levels. SCE has agreed to incorporate all the proposed mitigation measures into the project. The CPUC has included the stipulated mitigation measures as conditions of approval of the applications and has circulated a Draft EIR.

The attached EIR presents and analyzes potential environmental impacts that would result from construction, operation and maintenance of the new transmission line and substation modifications, and proposes mitigation measures, as appropriate. Based on the EIR, approval of the application would have no impact or less than significant impacts in the following areas:

- Land Use, Planning, and Policies
- Population and Housing
- Recreation
- Utilities and Service Systems

The EIR indicates that approval of the application would result in potentially significant impacts in the areas of:

- Aesthetics
- Air Quality
- Biological Resources
- Hydrology and Water Quality
- Noise
- Public Services

- Geology, Soils, Seismicity and Mineral Resources
- Hazards and Hazardous Materials
- Transportation and Traffic

The EIR indicates that approval of the application would result in significant unmitigable impacts in the in the areas of:

- Agricultural Resources
- Cultural Resources

Roles and Responsibilities

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures and any Applicant Proposed Measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this MMRCPP and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the Program. The CPUC has the authority to halt any activity associated with the proposed project if the activity is determined to be a deviation from the approved project or the adopted mitigation measures.

The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC, along with its mitigation monitor, will ensure that any variance process, which will be designed specifically for the proposed project, or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMRCPP, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC and the mitigation monitor assigned to the construction for their review and approval. In some cases, a variance may also require approval by a CEQA responsible agency.

Enforcement and Responsibility

The CPUC is responsible for enforcing the procedures for monitoring through the environmental monitor. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign its authority to their environmental monitor.

Mitigation Compliance Responsibility

SCE is responsible for successfully implementing all the adopted mitigation measures in this MMRCPP. The MMRCPP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

SCE shall inform the CPUC and its mitigation monitor in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its mitigation monitor will assess whether alternative mitigation is appropriate and specify to SCE the subsequent actions required.

Dispute Resolution Process

This MMRCPP is expected to reduce or eliminate many of the potential disputes concerning the implementation of the adopted measures. However, in the event that a dispute occurs, the following procedure will be observed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Program.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRCPP or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited relief.

General Monitoring Procedures

Mitigation Monitor

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with SCE. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

Construction Personnel

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the MMRCP, will be taken:

- Procedures to be followed by construction companies hired to do the work will be written into contracts between SCE and any construction contractors. Procedures to be followed by construction crews will be written into a separate agreement that all construction personnel will be asked to sign, denoting agreement.
- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the MMRCP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

General Reporting Procedures

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. SCE shall provide the CPUC with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable.

Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and SCE will develop a filing and tracking system.

Condition Effectiveness Review

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a MMRCP to ensure compliance during project implementation (CEQA 21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and
- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

Mitigation Monitoring, Reporting and Compliance Program

The table attached to this program presents a compilation of applicant proposed measures and the mitigation measures in the EIR. The purpose of the table is to provide a single comprehensive list of impacts, mitigation measures, monitoring and reporting requirements, and timing.

SCE proposed the following Applicant Proposed Measures (APMs) to minimize impacts to the biological and cultural resources from implementation of the Proposed Project. The impact analysis in this EIR assumed that these APMs would be implemented as part of the Proposed Project.

APM-BIO-01: Elderberry Avoidance. The elderberry avoidance guidelines of the USFWS (1999b) would be followed. At a minimum, all ground-disturbing activities should be avoided within 15 feet of any mature elderberries with basal stem diameters of 1 inch or greater. If elderberry plants with stems having a diameter of 1 inch or greater cannot be avoided, the USFWS would be consulted to develop mitigation measures appropriate to the type of impact.

APM-CUL-01: Documentation and Recordation of Affected Components of the Big Creek Hydroelectric System Historic District. SCE shall document the affected components of the BCHSHD to National Park Service Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) Level II or Level III standards prior to their removal. Based on the analysis in this EIR, while the APM related to elderberry avoidance would not fully mitigate impacts to elderberry beetles alone, it would be a necessary step for mitigating impacts and therefore was integrated into Mitigation Measure 4.4-2a. Likewise, implementation of the APM for cultural resources would lessen the impacts to historic resources, however, the overall impact would remain significant unmitigable. As such, both APMs are included below and are part of the Mitigation Monitoring, Reporting and Compliance Program.

**TABLE 8-1
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics				
<p>Impact 4.1-1: The Proposed Project would substantially damage scenic resources, <i>including</i>, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.1-1a: Treat Surfaces with Appropriate Colors, Finishes, and Textures. For all structures that are visible from moderate to highly sensitive viewing locations (e.g., SR 198 [Structures #20, #55A, #56, #93 and #94] and SR 245 [Structures #69 through #73]), SCE shall apply surface coatings with appropriate colors, finishes, and textures to most effectively blend the structures with the visible backdrop landscape. For structures that are visible from more than one sensitive viewing location, if backdrops are substantially different when viewed from different vantage points, the darker color shall be selected, because darker colors tend to blend into landscape backdrops more effectively than lighter colors, which may contrast and produce glare. At locations where a lattice steel tower or tubular steel pole would be silhouetted against the skyline, non-reflective, light-gray colors shall be selected to blend with the sky.</p> <p>SCE shall develop a SCE Structure Surface Treatment Plan for the lattice steel towers, tubular steel poles, and any other visible structures in consultation with a visual specialist designated by the CPUC, as appropriate, to ensure that the objectives of this measure are achieved. SCE shall submit the Structure Surface Treatment Plan to the CPUC for review and approval at least 90 days prior to the start of construction.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit Structure Surface Treatment Plan to CPUC for review.</p> <p>CPUC mitigation monitor to inspect compliance.</p>	<p>Submit plan to CPUC at least 90 days prior to commencement of construction activities.</p> <p>During construction of new poles/towers.</p>
	<p>Mitigation Measure 4.1-1b: Use of Non-Specular and Non-Reflective Materials. The transmission line conductors shall be non-specular and non-reflective, the insulators shall be non-reflective and non-refractive and the lattice structures shall be non-reflective.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>CPUC mitigation monitor to inspect compliance.</p>	<p>During construction of new poles/towers and installation of conductors and insulators.</p>
<p>Impact 4.1-2: Use of temporary staging area during the construction period could result in adverse impacts to visual quality. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.1-2: Reduce visibility of staging areas. All staging areas including storage sites for excavated materials, and helicopter fly yards, shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails,</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit final construction plans to CPUC for review.</p> <p>CPUC mitigation monitor to inspect compliance.</p>	<p>Submit plans to CPUC at least 60 days prior to commencement of construction activities.</p> <p>During construction of staging areas.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics (cont.)				
Impact 4.1-2 (cont.)	construction sites and staging areas and fly yards shall be visually screened using temporary screening fencing. Fencing shall incorporate aesthetic treatment through use of appropriate, non-reflective materials, such as chain link fence with light brown vinyl slats. SCE shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.			
Impact 4.1-3: Use of temporary construction pulling/splicing sites during the approximately nine to 12-month construction period could result in adverse impacts to visual quality. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.1-3: SCE shall not place equipment on the pulling/splicing sites any sooner than two weeks prior to the required use. After each pulling/splicing site is no longer being used, SCE and/or its contractors shall clean up the site and restore to preconstruction conditions and in accordance with the Storm Water Pollution Prevention Plan (SWPPP).	SCE and its contractors to implement measure as defined.	SCE to submit SWPPP to the CPUC for review CPUC mitigation monitor to inspect compliance at least once per week.	Submit plan to CPUC at least 30 days prior to the start of construction and during construction if modified During all phases of construction activities.
Impact 4.1-5: The Proposed Project could substantially degrade the existing visual character or quality of the Proposed Project site and its surroundings from public views. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.1-5: Implement Mitigation Measure 4.1-1.	See Mitigation Measure 4.1-1.	See Mitigation Measure 4.1-1.	See Mitigation Measure 4.1-1.
Impact 4.1-6: If night lighting is required during construction, the Proposed Project could adversely affect nighttime views in the project area. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.1-6: Reduce construction night lighting impacts. SCE shall design and install all lighting at project facilities, including construction and storage yards and staging areas, such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Construction Lighting Mitigation Plan to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SCE shall not order any exterior lighting fixtures or components until the Construction	SCE and its contractors to implement measure as defined.	SCE to submit Construction Lighting Mitigation Plan to CPUC for review. CPUC mitigation monitor to monitor compliance at least once per week.	Submit plan to CPUC at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. During all phases of construction activities that include nighttime construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics (cont.)				
Impact 4.1-6 (cont.)	<p>Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not limited to the following measures:</p> <ul style="list-style-type: none"> • Lighting shall be designed so exterior lighting is hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary. • All lighting shall be of minimum necessary brightness consistent with worker safety. • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied. 			
Impact 4.1-7: The Proposed Project could create new sources of glare. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.1-7: Implement Mitigation Measure 4.1-1b.	See Mitigation Measure 4.1-1b.	See Mitigation Measure 4.1-1b.	See Mitigation Measure 4.1-1b.
Agricultural Resources				
Impact 4.2-1: Construction activities would result in the temporary impacts to designated Farmland. <i>Less than significant with mitigation</i> (Class II)	<p>Mitigation Measure 4.2-1a: SCE and/or its contractors shall ensure that the following measures are taken, during construction of the Proposed Project:</p> <ul style="list-style-type: none"> • Replace soils in a manner that shall minimize any negative impacts on crop productivity. The surface and subsurface layers shall be stockpiled separately and returned to their appropriate locations in the soil profile. • To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top three feet) to within five percent of original density. 	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Agricultural Resources (cont.)				
Impact 4.2-1 (cont.)	<ul style="list-style-type: none"> Where necessary, the top soil layers shall be ripped to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers. Avoid working or traveling on wet soil to minimize compaction and loss of soil structure. Remove all construction-related debris from the soil surface. This shall prevent rock, gravel, and construction debris from interfering with agricultural activities. Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles. 			
	<p>Mitigation Measure 4.2-1b: SCE and/or its contractors shall incorporate the following measures into the project construction plans and specifications specific to lands designated as Farmland:</p> <ul style="list-style-type: none"> Coordinate construction scheduling as practicable so as to minimize disruption of agricultural operations by scheduling excavation to occur before or after the growing season. Minimize construction dust on crops by implementing Mitigation Measure 4.3-1b (see Section 4.3, Air Quality). Supply replacement crops and trees at a mitigation ratio of one to one, upon completion of construction. Coordinate planting of replacement crops and trees with landowners. 	SCE and its contractors to implement measure as defined.	<p>SCE to submit documentation of construction schedule in comparison to growing seasons to CPUC for review.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p> <p>SCE to submit documentation to CPUC demonstrating landowner coordination and location of replacement crops and trees.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During all phases of construction activities.</p> <p>Within 90 days of completion of construction activities.</p>
Impact 4.2-2: Construction activities would result in the permanent removal of designated Farmland. <i>Significant unmitigable</i> (Class I)	Mitigation Measure 4.2-2: For each acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that is permanently converted, SCE shall obtain one (1) acre of agricultural conservation easements. An agricultural conservation easement is a	SCE and its contractors to implement measure as defined.	SCE to submit copies of conservation easement agreements for CPUC review.	Submit documentation to CPUC prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Agricultural Resources (cont.)				
Impact 4.2-2 (cont.)	voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture. The easement places legally enforceable restrictions on the land. The exact terms of the easement are negotiated, but restricted activities shall include subdivision of that property, non-farm development, and other uses that are inconsistent with agricultural production. The mitigation lands must be of equal or better quality (according to the latest available FMMP data) and have an adequate water supply. In addition, the mitigation lands must be within the same county as the impact.			
Impact 4.2-4: The Proposed Project could involve removal of orchards which, due to their location or nature, could result in the conversion of additional Farmland to non-agricultural use. <i>Significant unmitigable (Class I)</i>	Mitigation Measure 4.2-4: Implement Mitigation Measure 4.2-2.	See Mitigation Measure 4.2-2.	See Mitigation Measure 4.2-2.	See Mitigation Measure 4.2-2.
Impact 4.2-5: The Proposed Project could impact existing irrigation and other ancillary systems required for farming productivity, resulting in the conversion of Farmland to non-agricultural use. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.2-5: SCE and/or its contractors shall incorporate the following measures into project construction plans and specifications specific to lands designated as Farmland: <ul style="list-style-type: none"> • Ensure that existing drainage systems at Proposed Project sites that are needed for farming activities function as necessary so that agricultural uses are not disrupted. • Coordinate with landowners to ensure that construction does not impact irrigation and/or other ancillary farming systems to a degree that farming practices cannot be maintained. • Maintain existing levels of water available to farmers via the current irrigation system. This may include, but not be limited to, implementing re-routing and/or temporary irrigation systems. 	SCE and its contractors to implement measure as defined.	SCE to submit construction plans and documentation demonstrating compliance to CPUC for review. CPUC mitigation monitor to monitor compliance.	Submit documentation to CPUC prior to commencement of construction activities. During all phases of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality				
<p>Impact 4.3-1: Construction activities could generate emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.3-1a: SCE shall submit an Air Impact Assessment application to the SJVAPCD that demonstrates how exhaust emissions from construction equipment greater than 50 horsepower shall be reduced by at least 20 percent from the statewide average NO_x emissions rate and 45 percent from the statewide average PM10 exhaust emission rate. The Air Impact Assessment shall also demonstrate that construction NO_x emissions associated with the project would be reduced to less than 10 tons per year. These reductions shall be achieved through any combination of on-site reduction measures (e.g., utilizing add-on controls, cleaner fuels or newer lower emitting equipment) and off-site reduction fees paid directly to the SJVAPCD. SCE shall provide a copy of the approved application to the CPUC prior to commencement of construction activities.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit a copy of the approved Air Impact Assessment application to CPUC.</p>	<p>Submit approved application to CPUC prior to commencement of construction activities.</p>
	<p>Mitigation Measure 4.3-1b: During construction, SCE and/or its contractors shall implement the following dust control measures.</p> <ul style="list-style-type: none"> • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover, or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. • When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>During all phases of construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-1 (cont.)	<ul style="list-style-type: none"> • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.)(Use of blower devices is expressly forbidden). • Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday. • Limit traffic speed on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Install windbreaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds exceed 20 mph. • Limit area subject to excavation, grading, and other construction activity at any one time. 			
Impact 4.3-3: The Proposed Project could result in permanently disturbed land that would serve as a source of fugitive dust emissions. <i>Less than significant with mitigation</i> (Class II)	<p>Mitigation Measure 4.3-3: After construction, SCE shall, in perpetuity, utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions from permanently disturbed land and new access and spur roads:</p> <ul style="list-style-type: none"> • Apply and maintain water or dust suppressants to all un-vegetated areas; or 	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance annually.	Following the completion of construction.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-3 (cont.)	<ul style="list-style-type: none"> • Establish native vegetation that is compliant with SCE line clearance requirements on all previously disturbed areas; or • Apply and maintain gravel or apply and maintain chemical/organic stabilizers/suppressants to all open areas. 			
Impact 4.3-4: Construction emissions associated with the Proposed Project could result in emissions of ozone precursors that would be cumulatively considerable. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.3-4: Implement Mitigation Measure 4.3-1a.	See Mitigation Measure 4.3-1a.	See Mitigation Measure 4.3-1a.	See Mitigation Measure 4.3-1a.
Impact 4.3-5: Construction emissions associated with the Proposed Project could result in emissions of particulate matter that would be cumulatively considerable. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.3-5: Implement Mitigation Measure 4.3-1b.	See Mitigation Measure 4.3-1b.	See Mitigation Measure 4.3-1b.	See Mitigation Measure 4.3-1b.
Impact 4.3-7: Construction activities could generate emissions of criteria pollutants, potentially exposing sensitive receptors to harmful pollutant concentrations. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.3-7: Implement Mitigation Measures 4.3-1a and 4.3-1b.	See Mitigation Measures 4.3-1a and 4.3-1b.	See Mitigation Measures 4.3-1a and 4.3-1b.	See Mitigation Measures 4.3-1a and 4.3-1b.
Impact 4.3-8: The Proposed Project would generate short-term and long-term emissions of GHGs. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.3-8a: Within 60 days of completion of project construction, SCE shall enter into a binding agreement to purchase carbon offset credits from the California Climate Action Registry (CCAR), or any source that is approved by the CPUC and that is consistent with the policies and guidelines of the California Global	SCE shall enter into a binding agreement to provide GHG emission offsets as defined in the measure.	SCE to provide a report to the CPUC documenting the source and amount of emission offsets.	Provide report within 60 days following completion of construction; implement offsets within 60 calendar months following completion of construction.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-8 (cont.)	<p>Warming Solution Act of 2006 (AB 32), to offset a minimum of 30 percent of the net annualized increase of greenhouse gas emissions from the Proposed Project for year 6 through the life of the project. The offsets identified in the binding agreement shall be implemented no later than 60 calendar months from completion of construction. The estimated amount of offsets required is 17.1 metric tons CO₂e per year (i.e., 30 percent of 57.1 metric tons CO₂e). However, the exact amount of greenhouse gas emissions to be offset may vary depending on whether any of the construction plans are modified. Within 60 days of completion of the Proposed Project, SCE shall submit a report for the CPUC's review and approval, which shall identify all construction- and operations-related emissions and the offset amounts that will be purchased from approved programs to result in a minimum 30 percent net reduction in annualized GHG emissions.</p> <p>Mitigation Measure 4.3-8b: During construction, SCE shall dispose of all removed trees and other green waste via the Tulare County's Wood and Green Waste Program. To ensure compliance with this program, SCE shall:</p> <ul style="list-style-type: none"> • collect all wood and green waste generated from the removal of orchard trees separately from other construction and demolition waste, and place wood and green waste in a separate recovery area; • keep wood and green waste free of contaminants such as dirt, rock concrete, plastic, metal and other contaminants which can damage wood waste processing equipment, and reduce the quality of the compost; and • prohibit the inclusion of yucca leaves, palm fronds or bamboo (which cannot be included in the salvage program) from the wood and green waste recovery area. 	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-8 (cont.)	Mitigation Measure 4.3-8c: Prior to the conclusion of construction, SCE shall establish, fund, and implement a tree replacement program with the Urban Tree Foundation of Visalia, CA (or other comparable organization in Tulare County) for the replacement of all permanently removed orchard trees on a 1.5 to 1 basis. The tree replacement program shall provide for the Urban Tree Foundation to select the tree species and suitable locations for the plantings, and shall also provide for the maintenance of the plantings for a minimum of one full year to maximize survival rate. SCE shall provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings. (Note: it is the intent of this mitigation measure to offset the loss of carbon sequestration from the permanent loss of trees, not to replace the loss of a particular crop; therefore, it is not required that the replacement trees be orchard species.)	SCE and its contractors to implement measure as defined.	SCE to provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings.	Prior to the completion of construction.
Biological Resources				
Impact 4.4-1: Construction activities could result in adverse impacts to the following special-status plant species: Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur and spiny-sealed button celery. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.4-1a: Rare plant surveys. SCE and/or its contractors shall conduct preconstruction surveys following CDFG and USFWS special-status plant survey guidelines to determine if populations are present in unsurveyed areas. Surveys shall document the location, extent, and size of special-status plant populations, if present, and shall be used to inform the planned avoidance of rare plant populations whenever possible. To the extent feasible, the final project design shall minimize impacts on known special-status plant populations that are identified in the project area (e.g., by routing access roads away from plant populations). SCE and/or its contractors shall establish an appropriate exclusion zone (e.g., greater than 50 feet) to minimize the potential for direct and indirect impacts such as fugitive dust and accidental intrusion into sensitive areas (see Mitigation Measure 4.3-1b for dust control measures). The exclusion zone shall be staked and flagged in the field by a qualified botanist prior to construction.	SCE and its contractors to implement measure as defined.	SCE to submit survey results and documentation demonstrating how final project design shall minimize impacts on known special-status plant populations to CPUC for review. CPUC mitigation monitor to monitor compliance at least once per week.	Submit documentation to CPUC prior to commencement of construction activities. During all phases of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-1 (cont.)	<p>Mitigation Measure 4.4-1b: Agency consultation, impact avoidance, minimization and compensation. If special status plants are identified and avoidance is not feasible, SCE shall compensate for the loss of special-status plants through the following steps:</p> <ul style="list-style-type: none"> • If special-status plant survey findings (Mitigation Measure 4.4-1a) indicate that the project would directly or indirectly impact a listed plant species, SCE shall consult with the USFWS and CDFG to determine if formal consultation is required under the State or federal Endangered Species Acts. • Impacts to identified special status plant populations shall be minimized by avoiding impacts whenever possible, minimizing impacts, and compensating for project impacts that cannot be avoided. • If impacts to special status plants cannot be avoided, a qualified ecologist shall prepare a restoration and mitigation plan according to CDFG guidelines and in coordination with CDFG and USFWS to mitigate for project effects. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-term sustainability. The mitigation plan shall apply to portions of the project that support special status plants and also to any required mitigation lands. • If threatened or endangered plant species are affected, land that supports known populations of affected special-status plants shall be identified, enhanced, and protected within the project area or acquired within Tulare County at a ratio of 1.1:1 and protected in perpetuity under conservation easement. 	SCE and its contractors to implement measure as defined.	<p>SCE to submit documentation demonstrating agency consultation and outlining avoidance, minimization, and compensation measures to CPUC for review.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During all phases of construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-1 (cont.)	<p>Mitigation Measure 4.4-1c: Noxious Weed and Invasive Plant Control Plan. SCE shall develop and implement a Noxious Weed and Invasive Plant Control Plan consistent with standard Best Management Practices (see for example: Department of Transportation, State of California (2003); Storm Water Quality Handbooks; and Project Planning and Design Guide Construction Site Best Management Practices Manual). The plan shall be reviewed and approved by Tulare County and the CPUC and shall, at a minimum, address any required cleaning of construction vehicles to minimize spread of noxious weeds and invasive plants.</p>	SCE and its contractors to implement measure as defined.	<p>SCE to submit Noxious Weed and Invasive Plant Control Plan to CPUC and Tulare County for review.</p> <p>CPUC mitigation monitor to monitor compliance.</p>	<p>Submit plan to CPUC and Tulare County prior to commencement of construction activities.</p> <p>During all phases of construction activities.</p>
<p>Impact 4.4-2: Construction activities could result in impacts on valley elderberry longhorn beetle and its habitat. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.4-2a: SCE and/or its contractors shall perform a focused elderberry shrub survey to identify elderberry shrub distribution in the project area and document project impacts to valley elderberry longhorn beetle. Surveys shall document the location, extent, and size of elderberry shrubs. If elderberry shrubs are identified in the project area and would be impacted by proposed activities, SCE shall consult with the USFWS as identified in Measure APM-BIO-01 (SCE, 2008), and implement Measure 4.4-2b.</p> <p>APM-BIO-01: Elderberry Avoidance. The elderberry avoidance guidelines of the USFWS (1999b) would be followed. At a minimum, all ground-disturbing activities should be avoided within 15 feet of any mature elderberries with basal stem diameters of 1 inch or greater. If elderberry plants with stems having a diameter of 1 inch or greater cannot be avoided, the USFWS would be consulted to develop mitigation measures appropriate to the type of impact.</p>	SCE and its contractors to implement measure as defined.	SCE to submit survey results and, if applicable, documentation showing USFWS consultation to CPUC for review.	Submit documentation to CPUC prior to commencement of construction activities.
	<p>Mitigation Measure 4.4-2b: If detailed surveys indicate that the project would directly or indirectly impact occupied valley elderberry longhorn beetle habitat, SCE shall consult with the USFWS to determine if formal consultation is required under the Endangered Species Act. SCE and/or its contractors shall avoid and minimize impacts to valley elderberry longhorn beetle and its</p>	SCE and its contractors to implement measure as defined.	SCE to submit documentation to CPUC demonstrating USFWS consultation as well as documentation outlining measures that shall be taken to avoid, minimize, and compensate for impacts when	Submit documentation to CPUC prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-2 (cont.)	<p>habitat wherever possible. Where impacts cannot be avoided, SCE shall provide compensation for project impacts based on USFWS guidelines (1999 or more current) for avoiding, minimizing, and mitigating project impacts on valley elderberry longhorn beetle. If avoidance is not feasible, USFWS general compensation guidelines call for replacement of elderberry plants in designated mitigation areas at a ratio from 2:1 to 5:1 for each stem greater than one inch in diameter. Note that replacement ratios are by stem and not by elderberry shrub. Replacement stock shall be obtained from local sources. Plants are generally replaced at a 2:1 ratio for stems greater than one inch in diameter at ground level with no adult emergence holes, 3:1 for stems where emergence holes are evident in less than 50 percent of the shrubs, and 5:1 for stems greater than one inch in diameter where emergence holes are present in greater than 50 percent of elderberry shrubs.</p> <p>SCE shall provide for replacement of elderberry shrubs by developing a restoration and mitigation plan as described in Measure 4.4-1b, to include success and performance criteria, monitoring programs, and measures to ensure long-term sustainability.</p>		<p>avoidance and minimization is not feasible.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>During all phases of construction activities.</p>
<p>Impact 4.4-3: Construction activities would result in direct and/or indirect impacts on existing populations of, and habitat for, Swainson's hawk and golden eagle. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.4-3a: SCE and/or its contractors shall implement the following measures:</p> <ul style="list-style-type: none"> • Whenever feasible, construction near recently active nest sites shall start outside the active nesting season. The nesting period for golden eagle is generally between March 1 and August 15. • If construction activities begin during the nesting period, a qualified biologist shall perform a preconstruction survey 14 to 30 days before the start of each new construction phase to search for golden eagle and Swainson's hawk nest sites within one-half mile of proposed activities. If active nests are not identified, no further action is required and construction may proceed. If active nests are identified, the avoidance guidelines identified below shall be implemented. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit survey results to the CPUC</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit results to CPUC within one week of completion of surveys.</p> <p>During all phases of construction activities and during maintenance activities that occur during golden eagle nesting periods.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-3 (cont.)	<ul style="list-style-type: none"> • For golden eagle, construction contractors shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones shall remain until young have fledged. For activities conducted with agency approval within this buffer zone, a qualified biologist shall monitor construction activities and the eagle nest(s) to monitor eagle reactions to activities. If activities are deemed to have a negative effect on nesting eagles, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. The resource agencies do not issue take authorization for this species. • If construction begins during the Swainson's hawk nesting period, a qualified biologist shall conduct preconstruction surveys at least 14 days prior to construction following CDFG guidance in areas that potentially provide nesting opportunities to verify species presence or absence. If the survey indicates presence of nesting Swainson's hawks within a half-mile radius, the results shall be coordinated with CDFG to develop and implement suitable avoidance measures that include construction buffers (e.g., 500 feet) and nest monitoring during construction. • Consistent with the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFG, 1994), mitigation shall include the following approach: • No intensive new disturbances or other project-related activities that could cause nest abandonment or forced fledging shall be initiated within a quarter mile (buffer zone) of an active nest between March 15 and September 15. • Nest trees shall not be removed unless no feasible avoidance exists. If a nest tree must be removed, SCE shall obtain a management authorization (including conditions to offset the loss of the nest tree) 			

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-3 (cont.)	<p>from CDFG. The tree removal period specified in the management authorization is generally between October 1 and February 1.</p> <ul style="list-style-type: none"> Monitoring of the nest by a qualified biologist may be required if the project-related activity has potential to adversely impact the nest. CDFG often allows construction activities that are initiated outside the nesting season to continue without stopping even if raptors such as golden eagles choose to nest within 500 feet of work activities. Thus, work may continue without delay if surveys verify the local absence of nesting golden eagles, or if construction begins outside the nesting period (August 16 through February 28). Following construction, SCE and/or its contractors shall survey for and monitor golden eagle nesting sites in the area to ensure that maintenance activities do not disrupt nest sites. Surveys will be performed at the beginning of the nesting season and continue through the nesting season. Consistent with present policy, disruptive maintenance activities will be suspended within 500 feet of active eagle nests until the young eagles have fledged. 			
	<p>Mitigation Measure 4.4-3b: SCE shall acquire and/or restore foraging habitat for Swainson's hawk in accordance with CDFG guidelines, set forth in Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFG, 1994), as follows:</p> <ul style="list-style-type: none"> Compensate for permanent foraging habitat losses (e.g., agricultural lands and annual grasslands) within one mile of active Swainson's hawk nests (acreage to be determined during preconstruction surveys) at a 1:1 replacement ratio). 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit documentation of acquired/restored Swainson's Hawk foraging habitat to CPUC for review.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
<p>Impact 4.4-4: Construction activities may impact protected nesting migratory birds. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.4-4: SCE and/or its contractors shall implement the following measures to avoid impacts on nesting raptors and other protected birds for activities that are scheduled during the breeding season (February 1 through August 31):</p> <ul style="list-style-type: none"> No more than two weeks before construction within each new construction area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction sites where access is available. If active nests are not identified, no further action is necessary. If active nests are identified during preconstruction surveys, a no-disturbance buffer shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers are 500 feet for raptors and 250 feet for other nesting birds (e.g., waterfowl, and passerine birds). The size of these buffer zones and types of construction activities that are allowed in these areas could be further modified during construction in coordination with CDFG and shall be based on existing noise and disturbance levels in the project area. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit resume of qualified wildlife biologist and survey results to CPUC for review.</p> <p>CPUC mitigation monitor to monitor compliance with buffer requirements if nests are identified.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During all construction activities that coincide with breeding season.</p>
<p>Impact 4.4-5: Construction activities could result in direct and indirect impacts on burrowing owl. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.4-5: SCE and/or its contractors shall conduct preconstruction surveys and implement measures to avoid impacts to burrowing owls.</p> <ul style="list-style-type: none"> A qualified biologist shall conduct preconstruction surveys for burrowing owls 14 to 30 days prior to the start of each new construction phase, using the most current CDFG protocol. Surveys shall cover grassland areas within a 500-foot buffer from all project construction sites within suitable grasslands habitat, checking for adult and juvenile burrowing owls and owl nests. If owls are detected during surveys, occupied burrows shall not be disturbed. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit resume of qualified wildlife biologist and survey results to CPUC for review.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During all construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-5 (cont.)	<ul style="list-style-type: none"> Construction exclusion areas (e.g., orange exclusion fence or signage) shall be established around the occupied burrows, where no disturbance shall be allowed. During the nonbreeding season (September 1 through January 31), the exclusion zone shall extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas shall extend 250 feet around occupied burrows. If the above requirements cannot be met, passive relocation of onsite owls may be implemented as an alternative, but only during the nonbreeding season and only with prior CDFG approval. Passive relocation shall be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project area. The one-way doors shall be left in place for 48 hours to ensure the owls have left the burrow. The burrows shall then be excavated with a qualified biologist present. Construction shall not proceed until the project area is deemed free of owls. 			
Impact 4.4-6: Construction activities could result in direct and indirect impacts on San Joaquin kit fox and its habitat. <i>Less than significant with mitigation (Class II)</i>	<p>Mitigation Measure 4.4-6: SCE and/or its contractors shall implement the following San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide potential habitat for San Joaquin kit fox.</p> <ul style="list-style-type: none"> Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. All potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these sites, they may be closed following guidance established in the 1999 USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox. 	SCE and its contractors to implement measure as defined.	<p>SCE to submit resume of qualified wildlife biologist and survey results to CPUC.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During all construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-6 (cont.)	<ul style="list-style-type: none"> • If kit fox occupancy is determined at a given site, closure activities shall immediately be halted and the USFWS contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. • To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat. • To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than two feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. • All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area. • To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area. 			
Impact 4.4-7: Operation of new transmission lines could impact raptors as a result of electrocution or collision. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.4-7: SCE shall follow Avian Power Line Interaction Committee guidelines for avian protection on powerlines. SCE shall use current guidelines to reduce bird mortality from interactions with powerlines. The Avian Power Line Interaction Committee (APLIC, 2006) and USFWS recommend the following:	SCE and its contractors to implement measure as defined.	SCE to submit final transmission line designs demonstrating compliance with guidelines to CPUC.	Submit documentation to CPUC prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-7 (cont.)	<ul style="list-style-type: none"> Provide 60-inch minimum horizontal separation between energized conductors or energized conductors and grounded hardware; Insulate hardware or conductors against simultaneous contact if adequate spacing is not possible; Use pole designs that minimize impacts to birds, and; Shield wires to minimize the effects from bird collisions. 			
Impact 4.4-8: Construction activities would impact riparian habitat, including native oak trees. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.4-8: SCE shall, through project design, avoid riparian vegetation (especially native oak trees) where feasible. Should the removal of mature native oak trees be deemed unavoidable, SCE shall compensate riparian habitat impacts through habitat restoration on a 3:1 mitigation ratio based on affected acreage and a 9:1 mitigation ratio based on impacted native oak trees.	SCE and its contractors to implement measure as defined.	SCE to submit documentation demonstrating compliance.	Submit documentation to CPUC prior to commencement of construction activities.
Impact 4.4-9: Construction activities could impact jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.4-9a: SCE and/or its contractors shall perform a wetland delineation and shall incorporate the results into the final design of transmission lines and access roads to ensure a minimum 50 foot construction buffer. The project shall be modified to minimize disturbance of any wetland, whenever feasible. In the event of any project changes that involve ground disturbance outside of the boundary of the existing wetland delineation, a new wetland delineation shall be performed.	SCE and its contractors to implement measure as defined.	SCE to submit wetland delineation and final designs demonstrating wetland avoidance to CPUC.	Submit documentation to CPUC prior to commencement of construction activities.
	<p>Mitigation Measure 4.4-9b: Where jurisdictional wetlands and other waters cannot be avoided, to offset temporary and permanent impacts that occur as a result of the project, restoration and compensatory mitigation shall be provided through the following mechanisms:</p> <ul style="list-style-type: none"> Purchase or dedication of land to provide wetland preservation, restoration or creation. If restoration is available and feasible, then a mitigation replacement ratio of at least 2:1 shall be used. If a wetland needs 	SCE and its contractors to implement measure as defined.	<p>SCE to submit documentation of wetland offsets to CPUC.</p> <p>SCE to submit wetland mitigation and monitoring plan and resume of plan preparer to CPUC and applicable regulatory agencies.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>Submit plan to CPUC and applicable regulatory agencies prior to commencement of construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-9 (cont.)	<p>to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented.</p> <ul style="list-style-type: none"> A wetland mitigation and monitoring plan shall be developed by a qualified biologist or wetland scientist in coordination with CDFG, USFWS, USACE, and/or RWQCB that details mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. The plan shall quantify the total acreage lost, describe mitigation ratios for lost habitat, annual success criteria, mitigation sites, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project. <p>The mitigation and monitoring plan shall be submitted to the appropriate regulatory agencies for approval. The plan and documentation of such agency approval shall be submitted to the CPUC prior to construction.</p>			
<p>Impact 4.4-10: Construction activities could impact valley oaks or protected landmark trees in the City of Visalia. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.4-10: Within the City of Visalia, existing trees in the project area shall be protected during construction by following Best Management Practices to minimize damage to such trees. These would include, but are not limited to, the following measures that shall be implemented by SCE:</p> <ul style="list-style-type: none"> Inventory valley oaks and landmark trees to determine their distribution within the project alignment; Establish tree protection zones that include most or all of the root zone and are also designed to protect the canopy of each tree to be retained on a site; Install tree protection fencing as needed to buffer and protect valley oaks or landmark trees from construction activities; Perform tree pruning and/or surgery as needed to enhance the health and structure of trees, and; 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit plan establishing Best Management Practices for avoiding impacts to landmark trees to CPUC.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit documentation to CPUC prior to commencement of construction activities.</p> <p>During construction activities occurring within the City of Visalia.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-10 (cont.)	<ul style="list-style-type: none"> Replace lost valley oaks or landmark trees at a 5:1 ratio within the City of Visalia, or fund the replacement of such trees by the City; Mitigate for soil compaction and tree injuries, including dust control. 			
Cultural Resources				
	APM-CUL-01: Documentation and Recordation of Affected Components of the Big Creek Hydroelectric System Historic District. SCE shall document the affected components of the BCHSHD to National Park Service Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) Level II or Level III standards prior to their removal.	SCE and its contractors to implement measure as defined.	SCE to submit documentation to the CPUC and the Office of Historic Preservation.	Submit documentation to CPUC and Office of Historic Preservation prior to commencement of construction activities.
Impact 4.5-2: Implementation of the Proposed Project could adversely affect known and unknown historic resources along the Proposed Project alignment. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.5-2a: SCE and/or its contractors shall draft and complete a Historic Properties Treatment Plan (HPTP) in consultation with the CPUC, and the Office of Historic Preservation, prior to construction of the Proposed Project. The HPTP shall document all historic properties within the ROW of the Proposed Project and evaluate previously unevaluated properties for significance. Properties to be evaluated shall include, but are not limited to: the Big Creek Hydroelectric System Historic District; the historic agricultural landscape of the Southern San Joaquin Valley; and other known historic resources that may be impacted by project construction. The HPTP shall also address the treatment of the Historic Landscape, and describe documentation measures to record and preserve the landscape. Measures may include video or photographic recording that can be used as an educational tool for the public. For other properties found to be significant, if those resources cannot be avoided, treatment shall be detailed to lessen any adverse impacts. The HPTP shall include analysis of data in a regional context, curation of artifacts such as historic machinery (except from private land) and data (maps, field notes, archival materials, recordings, reports,	SCE and its contractors to implement measure as defined.	SCE to submit Historic Properties Treatment Plan to the CPUC and the Office of Historic Preservation.	Submit plan to CPUC and Office of Historic Preservation prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-2 (cont.)	photographs, and analysts' data), and dissemination of reports to local and State repositories, libraries, and interested professionals. The HPTP shall specify that historians, historic architects, archaeologists and other discipline specialists conducting the studies meet the Secretary's Standards (per 36 CFR 61).			
	Mitigation Measure 4.5-2b: Additional Cultural Resources Survey. SCE and/or its contractors shall retain a qualified archaeologist (defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology) to survey those portions of the final selected project alignment that have not been previously subjected to systematic pedestrian cultural resources survey, including areas within private ownership. Newly discovered cultural resources shall be recorded on the appropriate Department of Parks and Recreation forms. Newly discovered cultural resources that may be adversely affected shall be evaluated for significance prior to construction of the Proposed Project; resources found to be significant shall be avoided during construction. If appropriate, prior to construction, a qualified archaeologist shall mark exclusion zones around known archaeological sites that can be avoided to ensure they are not impacted by construction. If avoidance is not feasible, prior to any ground disturbing activity, a site Treatment Plan specifying additional measures such as data recovery shall be prepared and submitted to the CPUC for review prior to construction.	SCE and its contractors to implement measure as defined.	SCE to submit resume of archaeologist, survey results and site Treatment Plan to CPUC. CPUC mitigation monitor to monitor compliance.	Submit documentation to CPUC prior to commencement of construction activities. During all phases of construction activities.
Impact 4.5-4: Implementation of the Proposed Project could adversely affect archaeological resources, including previously undocumented archaeological resources. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.5-4a: Identify the Locations of Known Archaeological Sites. Prior to the commencement of project construction, SCE and/or its contractors shall re-identify and document the site locations of all previously recorded archaeological sites within the final selected project alignment, including pull and tension sites, access roads, and any other areas to be disturbed. If it is determined that a site would be impacted by project construction, the affected site(s) shall be evaluated by a qualified archaeologist (defined as an archaeologist	SCE and its contractors to implement measure as defined.	SCE to submit resume of archaeologist, findings of site eligibility for listing in the California Register and site Treatment Plan (if required) to CPUC.	Submit documentation to CPUC prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-4 (cont.)	<p>meeting the Secretary of the Interior's Standards for professional archaeology) for their eligibility for listing in the California Register of Historic Resources or for their qualification as a unique archaeological resource under CEQA. If a resource is determined to be eligible, a site Treatment Plan shall be developed by a qualified archeologist in consultation with the CPUC and the SHPO. If the site evaluation results in an assessment that a resource is not eligible, no further work or protective measures shall be necessary.</p> <p>Mitigation Measure 4.5-4b: Cease Work if Subsurface Archaeological Resources are Discovered During Ground-Disturbing Activities. If archaeological resources are encountered, SCE and/or its contractors shall cease all activity in the vicinity of the find until the find can be evaluated by a qualified archaeologist (an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology). If the archaeologist determines that the resources may be significant, the archaeologist shall notify the CPUC and shall develop an appropriate site Treatment Plan for the resources. The archaeologist shall consult with Native American monitors or other appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.</p> <p>In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, SCE shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted in accordance with the site Treatment Plan. Work may proceed on other parts of the project site while mitigation for cultural resources is being carried out.</p>	SCE and its contractors to implement measure as defined.	<p>SCE to suspend all work and contact CPUC if archaeological resources are discovered.</p> <p>If resource is significant, submit site Treatment Plan and records of consultation with Native American representatives to CPUC.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>During all phases of construction activities.</p> <p>Within 5 business days of determining a find significant.</p> <p>During all phases of construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-5: Implementation of the Proposed Project could adversely affect paleontological resources. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.5-5: SCE and/or its contractors shall conduct a paleontological assessment of the Proposed Project area prior to construction of the Proposed Project. The assessment shall be completed by a paleontologist meeting the Society for Vertebrate Paleontology's standards for professional vertebrate paleontology. If sensitive paleontological resources are identified within the Proposed Project area, a Paleontological Resources Treatment and Monitoring Plan shall be developed and implemented in consultation with the CPUC.	SCE and its contractors to implement measure as defined.	SCE to submit resume of paleontologist and copy of paleontological assessment to CPUC. SCE to submit Paleontological Resources Treatment and Monitoring Plan to CPUC (if applicable).	Prior to commencement of construction activities.
Impact 4.5-6: Implementation of the Proposed Project could result in the disturbance of human remains. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.5-6: Halt Work if Human Skeletal Remains are Identified During Construction. If human skeletal remains are uncovered during project construction, SCE and/or its contractors shall immediately halt all work, contact the Tulare County coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. If the County coroner determines that the remains are Native American, SCE shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, SCE shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the SCE has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	SCE and its contractors to implement measure as defined.	If human remains are discovered, SCE is to notify the CPUC and Tulare County coroner within one hour. City mitigation monitor to monitor compliance at least once per week.	During all phases of construction activities.
Geology, Soils, Seismicity, and Mineral Resources				
Impact 4.6-5: The Proposed Project could result in substantial soil erosion or the loss of topsoil. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.6-5: Implement Mitigation Measure 4.8-1 and Mitigation Measure 4.2-1a.	See Mitigation Measures 4.8-1 and 4.2-1a.	See Mitigation Measures 4.8-1 and 4.2-1a.	See Mitigation Measures 4.8-1 and 4.2-1a.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials				
<p>Impact 4.7-1: Construction would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.7-1a: SCE and/or its contractors shall implement construction best management practices including but not limited to the following:</p> <ul style="list-style-type: none"> • Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction; • Avoid overtopping construction equipment fuel gas tanks; • Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel; • During routine maintenance of construction equipment, properly contain and remove grease and oils; and • Properly dispose of discarded containers of fuels and other chemicals. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>During all phases of construction.</p>
	<p>Mitigation Measure 4.7-1b: SCE shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit Hazardous Substance Control and Emergency Response Plan to CPUC for review and approval.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit plan to CPUC prior to commencement of construction activities.</p> <p>During all phases of construction.</p>
	<p>Mitigation Measure 4.7-1c: SCE shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit Health and Safety Plan to CPUC for review and approval.</p> <p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit plan to CPUC prior to commencement of construction activities.</p> <p>During all phases of construction.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-1 (cont.)	Mitigation Measure 4.7-1d: SCE shall ensure that a Workers Environmental Awareness Program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first program. SCE shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to attend the first program. SCE to submit copies of sign in sheets from training sessions.	Training to be completed prior to commencement of construction activities. Submit sign-in sheets to CPUC prior to commencement of construction activities.
	Mitigation Measure 4.7-1e: SCE shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 4.7-1b), which shall be implemented during construction.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction.
Impact 4.7-2: Blasting activities could pose a hazard to the public. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.7-2: A Blasting Safety Plan for construction shall be submitted to and approved by the CPUC and Tulare County Fire Department prior to construction that includes at a minimum, the following: <ul style="list-style-type: none"> Description of means for transportation and on-site storage and security of explosives in accordance with local, State and federal regulations. Minimum acceptable weather conditions for blasting and safety provisions for potential stray current (if electric detonation). Traffic control standards and traffic safety measures (if applicable). 	SCE and its contractors to implement measure as defined.	SCE to submit Blasting Safety Plan to CPUC and Tulare County Fire Department for review and approval. CPUC mitigation monitor to monitor compliance at least once per week.	Submit final plan to CPUC and Tulare County Fire Department prior to commencement of construction activities. During all phases of construction.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-2 (cont.)	<ul style="list-style-type: none"> • Requirement for provision and use of personal protective equipment. • Minimum standoff distances and description of blast impact zones and procedures for clearing and controlling access to blast danger. • Procedures for handling, setting, wiring, and firing explosives. Also, procedures for handling misfires per federal code. • Type and quantity of explosives and description of detonation device. Sequence and schedule of blasting rounds, including general method of excavation, lift heights, etc. • Methods of matting or covering of blast area to prevent flyrock and excessive air blast pressure. • Dust control measures in compliance with applicable air pollution control regulations (to interface with general construction dust control plan). • Emergency Action Plan to provide emergency telephone numbers and directions to medical facilities. Procedures for action in the event of injury. • Material Safety Data Sheets for each explosive or other hazardous materials to be used. • Evidence of licensing, experience, and qualifications of blasters. • Description of insurance for the blasting work. 			
Impact 4.7-3: Construction activities could release previously unidentified hazardous materials into the environment. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.7-3a: SCE's Hazardous Substance Control and Emergency Response Plan (as required under Mitigation Measure 4.7-1b) shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC	SCE and its contractors to implement measure as defined.	SCE to submit plan to CPUC for review and approval. CPUC mitigation monitor to monitor compliance at least once per week.	Submit plan to CPUC prior to commencement of construction activities. During all phases of construction.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-3 (cont.)	<p>designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of County and State agencies and primary, secondary, and final cleanup procedures. The Hazardous Substance Control and Emergency Response Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p> <p>Mitigation Measure 4.7-3b. SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC prior to construction.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit Soil Sampling and Analysis Plan to CPUC for review and approval.</p> <p>SCE to submit results of soil sampling and recommended resolutions to CPUC.</p> <p>CPUC mitigation monitor to monitor compliance.</p>	<p>Submit plan to CPUC for review at least 60 days prior to commencement of construction activities.</p> <p>Submit results of soil sampling and recommended resolutions to CPUC for review prior to commencement of construction activities.</p> <p>During excavation and treatment/disposal of contaminated soil/material.</p>
Impact 4.7-4: Construction activities could release hazardous materials within the vicinity of existing schools. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.7-4: Implement Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2.	See Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2.	See Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2.	See Mitigation Measures 4.7-1a through 4.7-1e and 4.7-2.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
<p>Impact 4.7-5: Construction activities at Rector Substation could release residual contamination associated with the closed Rector Substation spill site into the environment. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.7-5: Implement Mitigation Measure 4.7-3a.</p>	<p>See Mitigation Measure 4.7-3a.</p>	<p>See Mitigation Measure 4.7-3a.</p>	<p>See Mitigation Measure 4.7-3a.</p>
<p>Impact 4.7-6: The Proposed Project could create a safety hazard to aerial spray applicators. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.7-6: SCE shall consult with landowners to determine which aerial applicators cover agricultural parcels within one mile of the approved transmission line ROW. SCE shall provide written notification to all aerial applicators stating when the new transmission line and towers would be erected. SCE shall also provide all aerial applicators that operate in the area recent aerial photos or topographic maps clearly showing the location of the new lines and towers, as well as all existing SCE lines and towers within 10 miles of the approved corridor. The photos or maps shall also indicate the heights of the towers and conductors. SCE shall provide documentation of compliance to the CPUC.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit documentation to CPUC demonstrating that all aerial applicators have been notified.</p>	<p>Prior to commencement of construction activities.</p>
<p>Impact 4.7-7: Construction of the Proposed Project could interfere with an emergency response or evacuation plan. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.7-7: Implement Mitigation Measures 4.14-1b and 4.12-2.</p>	<p>See Mitigation Measures 4.14b and 4.12-2.</p>	<p>See Mitigation Measures 4.14b and 4.12-2.</p>	<p>See Mitigation Measures 4.14b and 4.12-2.</p>
<p>Impact 4.7-8: Construction activities could ignite dry vegetation and start a fire. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.7-8: SCE and/or its contractors shall have water tanks and/or water trucks sited/available in the project area for fire protection. All construction and maintenance vehicles shall have fire suppression equipment. Construction personnel shall be required to park vehicles away from dry vegetation. Prior to construction, SCE shall contact and coordinate with the California Department of Forestry (CalFire) and applicable local fire departments (i.e., Tulare County, City of Visalia, and City of Farmersville) to determine the</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit verification of its consultation with CalFire and local fire departments to CPUC. CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>Submit verification to CPUC prior to commencement of construction activities. During all phases of construction.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-8 (cont.)	appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SCE shall submit verification of its consultation with CalFire and the local fire departments to the CPUC.			
Impact 4.7-11: Induced currents associated with operation of the Proposed Project could generate electrical shocks. <i>Less than significant with mitigation</i> (Class II)	Mitigation Measure 4.7-11a: As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, and pipelines, that are within and near the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	SCE and its contractors to implement measure as defined.	SCE to submit documentation to CPUC identifying objects near ROW that require grounding. CPUC mitigation monitor to inspect compliance.	Submit documentation to CPUC prior to commencement of construction activities. During electrical grounding of metallic objects identified near the proposed ROW.
	Mitigation Measure 4.7-11b: Prior to construction, SCE shall coordinate with affected property owners to conduct an inventory of the groundwater wells that are within the proposed ROW. Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the minimum height of equipment that would be required to perform maintenance activities as well as the maximum line sag at the well locations, SCE shall identify wells that would not have the required minimum ground clearance to perform any necessary well maintenance and shall engage a qualified water well drilling contractor to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location. Abandonment of the old wells shall be conducted in accordance with all applicable well standards (DWR, 1991). All wells shall be relocated prior to electrifying the transmission line.	SCE and its contractors to implement measure as defined.	SCE to submit documentation to CPUC demonstrating coordination efforts between affected property owners. SCE to submit documentation to CPUC demonstrating that all affected wells were successfully relocated.	Submit documentation prior to commencement of construction activities. Submit documentation prior to electrifying new transmission line.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hydrology and Water Quality				
<p>Impact 4.8-1: Construction and maintenance of the Proposed Project could result in increased erosion and sedimentation and/or pollutant (e.g., fuels and lubricants) loading to surface waterways, which could increase turbidity, suspended solids, settleable solids, or otherwise decrease water quality in surface waterways. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.8-1: For all segments of new access roads that would be within 300 feet of an existing surface water channel (including irrigation ditches where no berm or levee is currently in place) and traverse a ground slope greater than two percent, the following protective measures shall be installed:</p> <ul style="list-style-type: none"> • Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side; • Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet). 	<p>SCE and its contractors to implement measure as defined.</p>	<p>CPUC mitigation monitor to inspect compliance.</p>	<p>During construction of new permanent access roads.</p>
<p>Impact 4.8-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.8-2: If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), SCE and/or its contractor shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with State hazardous waste disposal requirements.</p>	<p>SCE and its contractors to implement measure as defined.</p>	<p>CPUC mitigation monitor to monitor compliance at least once per week.</p>	<p>During all phases of construction that involve excavation.</p>
<p>Impact 4.8-3: Construction activities could impact local drainage patterns, or the course of a given stream, resulting in substantial on- or off-site erosion or sedimentation. <i>Less than significant with mitigation (Class II)</i></p>	<p>Mitigation Measure 4.8-3: Implement Mitigation Measure 4.8-1, described above.</p>	<p>See Mitigation Measure 4.8-1.</p>	<p>See Mitigation Measure 4.8-1.</p>	<p>See Mitigation Measure 4.8-1.</p>
Land Use, Planning, and Policies				
<p>No mitigation required.</p>				

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise				
<p>Impact 4.10-1: Blasting activities could expose people and/or structures to substantial vibration levels. <i>Less than significant with mitigation</i> (Class II)</p>	<p>Mitigation Measure 4.10-1: SCE and/or its contractors shall develop and implement a Blasting Plan for construction activities. The plan shall be submitted for review and approval by the CPUC. At a minimum, the plan shall include the following measures:</p> <ul style="list-style-type: none"> • Evidence of licensing, experience, and qualifications of blasters. • A Blast Survey Workplan shall be prepared by the blaster. The Plan shall establish vibration limits in order to protect structures from blasting activities and identify specific monitoring points. At a minimum, a pre-blast survey shall be conducted of any potentially affected structures and underground utilities within 500 feet of a blast area, as well as the nearest commercial or residential structure, prior to blasting. • The survey shall include visual inspection of the structures, documentation of structures by means of photographs, video, and a level survey of the ground floor of structures or the crown of major and critical utility lines, and these shall be submitted to the City. This documentation shall be reviewed with the individual owners prior to any blasting operations. The CPUC and impacted property owners shall be notified at least 48 hours prior to the visual inspections. • Scaled drawings of blast locations, and neighboring buildings, streets, or other locations that could be inhabited. • Blasting notification procedures, lead times, and list of those notified. Public notification to potentially affected vibration receptors describing the expected extent and duration of the blasting. • Description of blast vibration monitoring program. • Vibration and settlement threshold criteria (for example PPV of 0.2 inches per second) shall be submitted by the blaster to the CPUC for review and 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit Blasting Plan to CPUC for review and approval.</p> <p>CPUC mitigation monitor to monitor compliance.</p> <p>SCE to submit reports documenting damage, excessive vibrations, etc. to the CPUC and impacted property owners.</p>	<p>Submit plan to CPUC prior to commencement of construction activities.</p> <p>During all construction activities that include blasting.</p> <p>Within 24 hours of any blasting activity associated with construction of the project.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-1 (cont.)	<p>approval during the design process. If the settlement or vibration criteria are exceeded at any time or if damage is observed at any of the structures or utilities, then blasting shall immediately cease and the CPUC immediately notified. The stability of any structures, creek canals, etc. shall be monitored and any evidence of instability due to blasting operations shall result in immediate termination of blasting. The blaster shall modify the blasting procedures or use alternative means of excavating in order to reduce the vibrations to below the threshold values, prevent further settlement, slope instability, and/or to prevent further damage.</p> <ul style="list-style-type: none"> • Post-construction monitoring of structures shall be performed to identify (and repair if necessary) all damage, if any, from blasting vibrations. Any damage shall be documented by photograph, video, etc. This documentation shall be reviewed with the individual property owners. • Reports of the results of the blast monitoring shall be provided to the CPUC, the local fire department, and owners of any buried utilities on or adjacent to the site within 24 hours following blasting. Reports documenting damage, excessive vibrations, etc. shall be provided to the CPUC and impacted property owners. 			
Impact 4.10-4: Construction equipment would generate noise levels that would adversely affect nearby sensitive receptors. <i>Less than significant with mitigation (Class II)</i>	<p>Mitigation Measure 4.10-4a: SCE and/or its contractors shall employ the following noise reduction and suppression techniques during project construction to minimize the impact of temporary construction-related noise on nearby sensitive receptors:</p> <ul style="list-style-type: none"> • All construction equipment mufflers comply with manufacturers' requirements. • Nearby residents shall be notified of the construction schedule and how many days they may be affected by construction noise prior to commencement of 	SCE and its contractors to implement measure as defined.	<p>CPUC mitigation monitor to monitor compliance at least once per week and inspect equipment periodically.</p> <p>SCE to submit documentation of noise complaints and resolutions to CPUC on a weekly basis.</p>	<p>During all phases of construction.</p> <p>During all phases of construction.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
<p>Impact 4.10-4 (cont.)</p>	<p>construction activities. Notices sent to residents shall include a project hotline where residents would be able to call and issue complaints. All calls shall be returned by SCE and/or its contractor within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC weekly.</p> <ul style="list-style-type: none"> • Idling of engines shall be minimized; engines shall be shut off when not in use except in cases where idling is required to ensure safe operation of equipment or when idling is necessary to accomplish work for which the piece of equipment was designed (such as operating a crane). • Compressors and other small stationary equipment shall be shielded with portable barriers when operated within 100 feet of residences. <p>Mitigation Measure 4.10-4b: In the event that nighttime (i.e., between 8:00 p.m. and 6:00 a.m.) construction activity is determined to be necessary, a nighttime noise reduction plan shall be developed by SCE and submitted to the CPUC for review and approval. The noise reduction plan shall include a set of site-specific noise attenuation measures that apply state of the art noise reduction technology to ensure that nighttime construction noise and levels and associated nuisance are reduced to the most extent feasible. The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are determined by SCE to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the nighttime noise reduction plan.</p> <ul style="list-style-type: none"> • Plan construction activities to minimize the amount of nighttime construction. • Offer temporary relocation of residents within 200 feet of nighttime construction areas. 	<p>SCE and its contractors to implement measure as defined.</p>	<p>SCE to submit nighttime noise reduction plan to CPUC for review and approval.</p> <p>CPUC mitigation monitor to monitor compliance.</p>	<p>Submit plan to CPUC prior to commencing any nighttime construction activities.</p> <p>During all phases of construction that include nighttime construction activities.</p>

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-4 (cont.)	<ul style="list-style-type: none"> Temporary noise barriers, such as shields and blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., drilling rigs, generators, pumps, etc.). Install temporary noise walls that blocks the line of sight between nighttime activities and the closest residences. The notification requirements identified in Mitigation Measure 4.10-4a shall be extended to include residences within 1,000 feet of pending nighttime construction activities. 			
Impact 4.10-5: Blasting activities could expose people to substantial noise levels. <i>Less than significant with mitigation (Class II)</i>	<p>Mitigation Measure 4.10-5: SCE and/or its contractors shall, at a minimum, include the following measures within the Blasting Plan described under Mitigation Measure 4.10-1 (above).</p> <ul style="list-style-type: none"> Methods of matting or covering of blast area to prevent excessive air blast pressure. Description of air blast monitoring program. 	SCE and its contractors to implement measure as defined.	See Mitigation Measure 4.10-1.	See Mitigation Measure 4.10-1.
Population and Housing				
No mitigation required.				
Public Services				
Impact 4.12-1: Project construction activities could temporarily increase the demand for fire protection services. <i>Less than significant with mitigation (Class II)</i>	<p>Mitigation Measure 4.12-1a: SCE shall implement Mitigation Measure 4.7-1c (see Section 4.7, <i>Hazards and Hazardous Materials</i>) which requires preparation of a Health and Safety Plan. In addition, this Plan shall address emergency medical services in the case of an emergency. The Plan shall list procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. SCE shall submit the Plan to the CPUC for review prior to construction of the Proposed Project. Additionally, the Plan shall be distributed to all construction crew members involved in the project prior to construction and operation of the project.</p>	SCE and its contractors to implement measure as defined.	See Mitigation Measure 4.7-1c.	See Mitigation Measure 4.7-1c.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Public Services (cont.)				
Impact 4.12-1 (cont.)	Mitigation Measure 4.12-1b: Implement Mitigation Measure 4.7-8.	See Mitigation Measure 4.7-8.	See Mitigation Measure 4.7-8.	See Mitigation Measure 4.7-8.
Impact 4.12-2: Project construction activities in proximity to public roadways could potentially affect vehicle access and fire department response times. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.12-2: SCE shall coordinate with the Tulare County and the cities of Visalia and Farmersville emergency service providers prior to construction to ensure that construction activities and associated lane closures would not significantly affect emergency response vehicles. SCE shall submit verification of its consultation with emergency service providers to the CPUC.	SCE and its contractors to implement measure as defined.	SCE to submit verification of its consultation with emergency service providers to the CPUC.	Prior to commencement of construction activities.
Impact 4.12-3: Project construction activities could temporarily increase the demand for police services. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.12-3a: SCE shall implement standard precautionary measures, such as securing equipment when left unattended, to minimize theft and vandalism.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction.
	Mitigation Measure 4.12-3b: SCE shall provide traffic control, if necessary, in coordination with the appropriate police agency. For the crossing of any private or public roadways, safety measures such as barriers, flagmen, or other traffic control shall be used for public protection during wire installation.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance.	During all phases of construction involving wire installation over road crossings.
	Mitigation Measure 4.12-3c: SCE shall implement public safety measures, including the covering and securing of all open holes once activity at that location is stopped (after hours), and the placement of safety structures adjacent to roadways during overhead wire installation activity to protect vehicles and pedestrians.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction.
Recreation				
No mitigation required				
Transportation and Traffic				
Impact 4.14-1: Construction activities could adversely affect traffic and transportation conditions in the project area. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.14-1a: SCE shall also coordinate short-term construction activities at private road crossings with the applicable private property owners. Copies of all encroachment permits and evidence of private property coordination shall be provided to the CPUC prior to the commencement of construction activities.	SCE and its contractors to implement measure as defined.	SCE to submit copies of encroachment permits and evidence of coordination with private property owners.	Prior to commencement of construction activities.

TABLE 8-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Transportation and Traffic (cont.)				
Impact 4.14-1 (cont.)	<p>Mitigation Measure 4.14-1b: SCE shall prepare and implement a Traffic Management Plan subject to approval of Caltrans and/or the applicable local government(s). The approved Traffic Management Plan and documentation of agency approvals shall be submitted to the CPUC prior to the commencement of construction activities. At a minimum, the plan shall:</p> <ul style="list-style-type: none"> • Include a discussion of work hours, haul routes, work area delineation, traffic control and flagging; • Identify all access and parking restriction and signage requirements; • Require workers to park personal vehicles at the approved staging area and take only necessary project vehicles to the work sites. 	SCE and its contractors to implement measure as defined.	<p>SCE to submit Traffic Management Plan and documentation showing agency approval to CPUC.</p> <p>CPUC mitigation monitor to monitor compliance.</p>	<p>Prior to commencement of construction activities.</p> <p>During all phases of construction.</p>
	<p>Mitigation Measure 4.14-1c: SCE shall coordinate with Caltrans local government(s), and/or and any other appropriate entity, regarding measures to minimize the cumulative effect of simultaneous construction activities in overlapping areas.</p>	SCE and its contractors to implement measure as defined.	SCE to submit documentation demonstrating agency coordination to CPUC.	Prior to commencement of construction activities.
Impact 4.14-2: Project construction activities could increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.14-2: Implement Mitigation Measure 4.14-1b.	See Mitigation Measure 4.14-1b.	See Mitigation Measure 4.14-1b.	See Mitigation Measure 4.14-1b.
Impact 4.14-3: Construction activities could result in delays for emergency vehicles on project area roadways. <i>Less than significant with mitigation (Class II)</i>	Mitigation Measure 4.14-3: Implement Mitigation Measures 4.14-1b and 4.12-2.	See Mitigation Measure 4.14-1b and 4.12-2.	See Mitigation Measure 4.14-1b and 4.12-2.	See Mitigation Measure 4.14-1b and 4.12-2.

Decision 10-07-043 July 29, 2010

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U-338-E) for a Certificate of Public Convenience and Necessity for the San Joaquin Cross Valley Loop Transmission Project.

Application 08-05-039
(filed May 30, 2008)

**DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY
A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP
TRANSMISSION PROJECT**

TABLE OF CONTENTS

Title	Page
DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY	2
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT	2
1. Summary	2
2. Procedural Background	2
2.1. Application and Protests	2
2.2. Public Participation	3
2.3. Environmental review	5
2.4. Evidentiary Hearings and Briefing	5
3. Scope of Issues.....	6
4. Public Convenience and Necessity	8
5. Description of Project Alternatives	9
6. Significant Environmental Impacts and Mitigation	11
6.1. Summary	11
6.2. Agricultural Resources	11
6.3. Cultural Resources	13
6.4. Biological Resources.....	14
6.5. Unique Adverse Impacts (Alternative 3A).....	15
7. Environmental Superior Alternative	15
8. Certification of EIR	16
8.1. Evaluation of Alternative 3A	17
8.2. Analysis of Environmental Impacts	20
8.2.1. Paramount Citrus	20
8.2.2. Visalia	23
8.2.3. Farmersville	25
8.3. Sufficiency of Mitigation Measures.....	26
8.3.1. Paramount Citrus	26
8.3.2. Farm Bureau	26
8.3.3. Visalia	30
8.4. Identification of Environmentally Superior Alternative.....	31
9. Infeasibility of Environmentally Superior Alternative	32
9.1. Route Selection.....	32
9.1.1. SCE.....	32
9.1.2. Farm Bureau.....	35

Title	Page
9.2. Additional Mitigation	36
10. Overriding Considerations	37
11. EMF.....	38
12. Project Cost.....	39
13. Comments on Proposed Decision.....	41
14. Assignment of Proceeding	42
ORDER	44
ATTACHMENT 1 - Mitigating Monitoring, Reporting and Compliance Program	
ATTACHMENT 2 - SJXVL Mailing List	

**DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY A
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP
TRANSMISSION PROJECT**

1. Summary

This decision grants Southern California Edison Company a certificate of public convenience and necessity to construct the San Joaquin Cross Valley Loop Transmission Project, using the environmentally superior project Alternative 2 identified in the Environmental Impact Report. As the lead agency for environmental review of the project, we find that the Environmental Impact Report prepared for this project meets the requirements of the California Environmental Quality Act, and that there are overriding considerations that merit construction of the project notwithstanding its significant and unavoidable environmental impacts. We adopt a maximum project cost of \$122.182 million, excluding allowances for funds used during construction. This proceeding is closed.

2. Procedural Background

2.1. Application and Protests

Southern California Edison Company (SCE) filed this application on May 30, 2008. As proposed by SCE, the San Joaquin Cross Valley Loop would consist of the construction of a new 19 mile double-circuit 220 kilovolt (kV) transmission line, beginning at Rector Substation located southeast of Visalia, and running east until the line intersects with the Big Creek 3-Springville 220 kV transmission line located east of Lemon Cove and Highway 198 (Alternative 1). SCE also identified several project alternatives including Alternative 2, under which the transmission line would turn east starting approximately 10 miles

north of Alternative 1's easterly turn, and Alternative 3, which would turn east starting approximately 13.5 miles north of Alternative 1's easterly turn.

Protests were filed by the City of Visalia (Visalia); the City of Farmersville (Farmersville); the Kaweah Delta Water Conservation District; the Tulare County Farm Bureau; Protect Agriculture Communities Environment (PACE); Merryman Ranch Corporation, Sierra View Ranch and Valley View Ranch (jointly); Barbrae Lundberg; Kenneth Fitzgerald and Susan Fitzgerald (jointly); Gayle Mosby; Eric Quek; John O. Kirkpatrick and Shirley B. Kirkpatrick (jointly, Kirkpatricks); William F. Pensar; Mary Amanda Gorden; and George A. McEwen.

The California Farm Bureau Federation's unopposed motion for party status was granted by oral ruling at the prehearing conference on November 19, 2008.

The Paramount Citrus Association's (Paramount Citrus) unopposed motion for party status, filed August 31, 2009, was granted by ruling dated September 15, 2009.

2.2. Public Participation

The Commission received over 1,200 letters from the public objecting to the proposed project. Most of the letters expressed opposition to Alternative 1 on the basis of its impacts on agricultural resources, aesthetic resources, property values and economic development in the City of Farmersville, and preference for Alternative 3 on the basis that it would impact the fewest residents.

Approximately 300 people attended the public participation hearing held in Visalia on November 19, 2008. Fifty-nine people spoke regarding the proposed project's impacts on agricultural resources, aesthetic resources, economic development, property values and impact on the community.

Approximately 25 speakers objected to the proposed project's aesthetic impacts by interfering with views of the Sierra Nevada and creating blight. Most of them raised concerns specific to Alternative 1 for its adverse aesthetic impacts in and about the towns of Exeter and Lemon Cove, along State Route 198, and on the private residential development of Badger Hill, and its potential interference with the future development of a retail site in Farmersville, which has the potential to bring economic opportunities to the community.

Nearly 20 speakers addressed agricultural concerns. They noted Tulare County's agricultural tradition and range of crops that contribute to making it the second-leading agricultural producing area in California. The speakers urged the Commission to consider the project's impacts on the area's agricultural tradition, productivity and employment. The proposed project will require not only the removal of trees in walnut and citrus orchards, but also the relocation of wells and rerouting and rebuilding of irrigation systems. These impacts would extend up to 100 feet beyond both sides of the right of way due to the inability to operate the necessary construction and maintenance machinery close to the transmission lines. Seven speakers stated their preference for Alternative 3 on the basis that it would impact the fewest people, cross less valuable land, and be the shortest route, while two speakers raised concerns that Alternative 3 would adversely impact their own farming operations.

Several other speakers raised various other concerns including the proposed project's impacts on air quality, cultural resources including Native American paintings and spiritual sites, biological resources including shrimp and migrating birds, and public safety resulting from electromagnetic fields. One speaker urged the Commission to consider the potential for alternative tower configurations to reduce adverse impacts, and another speaker

urged the Commission to consider the potential for solar development to replace the need for this project.

2.3. Environmental review

On August 22, 2008, the Commission's Energy Division staff issued a Notice of Preparation (NOP) of an environmental impact report (EIR) for the proposed project. The NOP described the proposed project, solicited written and oral comments on the EIR's scope, and gave notice of the public scoping meetings to be held on September 17, 2008, in Farmersville, California, and on September 18, 2008, in Woodlake, California. Energy Division received 44 oral comments at the public scoping meetings and 96 letters or electronic mails during the 30-day comment period. Energy Division issued the draft EIR on June 16, 2009,¹ and conducted a public comment meeting on July 23, 2009, in Visalia, California, which was attended by approximately 500 people. Energy Division received oral comments from 37 people at the public comment meeting, and written comments from 129 persons and/or organizations during the 45-day comment period. Energy Division responded to all comments in the final EIR, which it issued on February 23, 2010.

2.4. Evidentiary Hearings and Briefing

On June 23, 2009, the assigned Commissioner issued a scoping memo and ruling which noted issuance of the draft EIR on June 16, 2009, identified the issues to be determined by the Commission in resolving the proceeding (see Section 3, below), and set a schedule for addressing those issues. In particular, the scoping memo determined that the proposed project's significant

¹ The draft EIR was received into evidence at the evidentiary hearing on August 31, 2009.

environmental impacts, mitigation measures to eliminate or lessen those impacts, and identification of the environmentally superior alternative are within the scope of the CEQA review, and that factual evidence regarding those issues would be admitted into the evidentiary record through the EIR; evidence regarding all other issues would be taken through evidentiary hearing.

Evidentiary hearing was conducted on August 31, 2009.² The final EIR was received into the evidentiary record by Administrative Law Judge (ALJ) ruling on February 25, 2010.

SCE, the City of Visalia, the City of Farmersville, California Farm Bureau Federation and Tulare County Farm Bureau (jointly, Farm Bureau), and PACE filed opening briefs on all issues on March 11, 2010; Paramount Citrus filed its opening brief on March 12, 2010.³ The record was submitted upon the filing of reply briefs on March 25, 2010, by SCE, Farm Bureau, PACE, Farmersville, and the Kirkpatricks.

3. Scope of Issues

Pursuant to Pub. Util. Code § 1001 et seq., SCE may not construct its proposed project absent certification by the Commission that the present or future public convenience and necessity require it. In determining whether to certify construction of the project, the Commission must consider community values, recreational and park areas, historical and aesthetic values, and the influence on the environment. (Pub. Util. Code § 1002(a).) The review process

² The unopposed October 2, 2009, motion of SCE to correct the transcript of the August 31, 2009, evidentiary hearing is hereby granted.

³ The unopposed March 31, 2010, motion of Paramount Citrus to accept its late-filed opening brief is hereby granted.

established by the California Environmental Quality Act (CEQA) is the primary vehicle for this consideration. CEQA requires the lead agency (the Commission in this case) to conduct a review to identify environmental impacts of the project and ways to avoid or reduce environmental damage. CEQA precludes the lead agency from approving a proposed project unless it requires the project proponent to eliminate or substantially lessen all significant effects on the environment where feasible, and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations. CEQA requires that, prior to approving the project or a project alternative, the lead agency certify that the environmental review was conducted in compliance with CEQA, that it reviewed and considered the EIR prior to approving the project or a project alternative, and that the EIR reflects its independent judgment. (Pub. Res. Code § 21082.1(c)(3), CEQA Guidelines § 15090.)

In addition, pursuant to General Order 131-D and Decision (D.) 06-01-042, the Commission will not certify a project unless its design is in compliance with the Commission's policies governing the mitigation of electromagnetic field (EMF) effects using low-cost and no-cost measures.

Accordingly, the June 23, 2009, Scoping Memo and Ruling determined the following issues to be within the scope of the proceeding:

1. Does the proposed project serve a present or future public convenience and necessity? (Pub. Util. Code § 1001.)
2. What are the significant environmental impacts of the proposed project?
3. Are there potentially feasible mitigation measures that will eliminate or lessen the significant environmental impacts?
4. As between the proposed project and the project alternatives, which is environmentally superior?

5. Was the EIR completed in compliance with CEQA, did the Commission review and consider the EIR prior to approving the project or a project alternative, and does the EIR reflect the Commission's independent judgment? (CEQA Guideline § 15090.)⁴
6. Are the mitigation measures or project alternatives infeasible? (CEQA Guideline 15091(a)(3).) This issue includes consideration of community values pursuant to Pub. Util. Code § 1002(a)(1).
7. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative? (CEQA Guideline § 15093.)
8. Is the proposed project and/or project alternative designed in compliance with the Commission's policies governing the mitigation of EMF.
9. If a certificate is granted, what is the maximum cost of the approved project? (Pub. Util. Code § 1005.5(a).)

4. Public Convenience and Necessity

SCE states that the project is needed in order to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor. SCE notes that, on June 24, 2004, the California Independent System Operator Board of Governors approved the looping of the Big Creek 3-Springville 220 kV transmission line into the Rector Substation as the preferred long-term transmission alternative to address identified reliability concerns. No party disputes the need for the project. We find it necessary to loop the Big Creek

⁴ This issue was listed as no. 7, and other issues numbered accordingly, in the scoping memo.

3-Springville 220 kV transmission into the Rector Substation to address reliability concerns.

5. Description of Project Alternatives

The EIR evaluated SCE's preferred Alternative 1, a "no project" alternative, and three alternative transmission route alignments (Alternatives 2, 3 and 6) that were identified through the scoping process and meet the project purpose. In addition, in response to comments on the draft EIR, the final EIR environmentally screened a variation to Alternative 3, dubbed "Alternative 3A."

Alternative 1 would proceed from the Rector Substation to 1.1 miles north within the existing SCE right of way, and then traverse east from the City of Visalia north of the cities of Farmersville and Exeter to the Big Creek 4-Springville existing transmission line located at the western foothills of the Sierra Nevada Mountains, generally crossing agricultural lands and scattered rural residences. The total length of the Alternative 1 is approximately 19 miles.

Alternative 2 would proceed from the Rector Substation north in the existing right of way to mile 10.8, 9.7 miles past the point where Alternative 1 turns east. At mile 10.8, the alignment turns east for 3.5 miles, and then turns north to parallel Road 176 until Avenue 376. The alignment then proceeds east, paralleling Avenue 376 and then southeast through a saddle along the base of Colvin Mountain until Road 1945. From mile 17.3 to mile 17.9, the alignment extends south and then southeast until Road 196. From there, the alignment extends east for approximately 1.2 miles and the south for approximately 0.6 miles. At mile 19.7, the alignment turns east along the base of Lone Oak Mountain and continues east until it reaches the existing Big Creek 3-Springville transmission line. The total length of Alternative 2 is approximately 23 miles.

Alternative 3 would proceed from the Rector Substation north in the existing right of way to mile 14.6, 13.5 miles past the point where Alternative 1 turns east. At mile 14.6 (approximately 400 feet south of the Friant-Kern Canal), the alignment turns east and crosses Stokes Mountain for approximately 3 miles. The alignment then descends from the Stokes Mountain ridgeline for approximately 1 mile and turns northeast to parallel the Stokes Mountain/Stone Corral Canyon interface for approximately 4 miles. The alignment then crosses Boyd Drive and continues in the same northeasterly direction to crest the Goldstein Peak ridgeline at mile 23. The alignment then descends into the Rattlesnake Creek Valley until it reaches the existing Big Creek 3-Springville transmission line. The total length of Alternative 3 is approximately 24.3 miles.

Alternative 3A would incorporate a variation to Alternative 3 that would avoid the Stone Corral Ecological Reserve and its sensitive biological resources.

Alternative 6 would proceed from the Rector Substation north in the existing right of way to mile 8.1, 7 miles past the point where Alternative 1 turns east. At mile 8.1, the alignment turns east for approximately 6.9 miles. At mile 15, the alignment turns north for 2 miles. At mile 17, the alignment would head east and then northeast for approximately 0.3 miles where it would begin to follow the same alignment as Alternative 2 until it reached the existing Big Creek 3-Springville transmission line. The total length of Alternative 6 is approximately 20.5 miles.

Under the “no project” alternative, the proposed project would not be implemented and the reliability issues would continue.

6. Significant Environmental Impacts and Mitigation

6.1. Summary

Under all of the alternatives, the proposed project would have significant and unavoidable adverse impacts on agricultural resources and on cultural resources. In addition, Alternative 3 would have unavoidable significant adverse impacts on biological resources, and Alternative 3A would have additional adverse impacts on aesthetics and land use, planning and policies as compared to Alternative 2.

Under the “no project” alternative, the proposed project would not be implemented and, therefore, no adverse environmental impacts would occur.

6.2. Agricultural Resources

Construction of Alternative 1’s new permanent access roads and placement of 114 new poles and lattice towers would permanently disturb approximately 31.9 acres of farmland, including 16.8 acres of “prime farmland,” 0.7 acres of “unique farmland, and 14.4 acres of ‘farmland of statewide importance’” as defined by the Department of Conservation Farmland Mapping and Monitoring Program. A variety of crops are currently grown within these 31.1 acres, the most common of which are oranges (13.8 acres) and walnuts (5.0 acres), which would be permanently disturbed by this construction.

Although agricultural uses, including hundreds of dairies and thousands of acres of citrus and walnut groves, still dominate Tulare County’s landscape, the County has seen a reduction in agricultural land to due urbanization, with a reduction of 12,355 acres of farmland between 2004 and 2006. The acreage of farmland in Tulare County is generally expected to continue to decline, and Alternative 1 would contribute incrementally to it.

As mitigation defined in the EIR, SCE would be required to obtain an acre of agricultural conservation easement⁵ for every acre of prime farmland, unique farmland, and farmland of statewide importance⁶ that is permanently converted. While this mitigation would reduce the impact of the conversion of farmland to non-agricultural uses, Alternative 1 would nonetheless result in the permanent conversion of farmland and contribute to the decline in farmland acreage in Tulare County. This impact to farmland would be significant and unavoidable.

As with Alternative 1, construction of roads and new pole sites for Alternatives 2, 3, 3A and 6 would permanently remove farmland to non-agricultural use. This impact to agricultural resources would be significant and unavoidable. The following table sets forth the amount of farmland acreage that would be permanently removed from agricultural use, by alternative:

Alternative	1	2	3	3A	6
Farmland acreage	31.9	25.6	18.2	21.8	31.6

The draft EIR preliminarily determined that, under all alternatives, the proposed project would require the removal of walnut trees from the new portions of the rights of way, which would cause a further significant and unavoidable impact to agricultural resources. Specifically, under General Order 95, shrubs and trees located within a right of way under transmission lines must be maintained to not exceed a 15-foot height. The draft EIR determined that, while orange and other citrus trees can remain productive

⁵ An agricultural conservation easement is a voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture.

when cropped to this height, walnut trees cannot. Consequently, the draft EIR determined that the proposed project would effectively convert walnut acreage located in the new rights of way to non-agricultural use. However, upon further analysis in response to comments, the final EIR determined that this significant impact can be avoided by increasing the height of the transmission line to allow for a maximum walnut height of 30 feet. (Final EIR, at G-17 – G-18.)

6.3. Cultural Resources

The Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission line and the Rector Substation are part of the Big Creek Hydroelectric System Historic District (Historic District). The generation and transmission facilities of the Big Creek system date between 1911 and 1929, and are eligible for listing in the National Register of Historic Places and the California Register of Historic Resources. The Rector Substation was constructed at the same time, and is eligible for listing in the California Register of Historic Places.

Alternative 1 would require demolishing and removing approximately 26 original single-circuit lattice towers within the transmission line right of way. In addition, this alternative would require demolishing and removing original 220 kV transmission line towers from the Rector switchyard, installing a tubular steel pole and adding a pre-fabricated metal mechanical and electrical equipment room adjacent to the substation building. These activities would adversely impact the facilities' physical characteristics that qualify them for inclusion in the California Register of Historic Resources. Although SCE would document the adversely affected components of the Historic District prior to their removal,

⁶ All subsequent references to "farmland" refer specifically to combined prime farmland, unique farmland and farmland of statewide importance.

which would lessen the impacts, the impacts would remain significant and unavoidable.

Approximately 10.8 miles of Alternative 2, 14.6 miles of Alternatives 3 and 3A, and 8.1 miles of Alternative 6 would be located within the Big Creek 1-Rector 220 kV transmission line right of way. All four alternatives would have similar significant and unavoidable impacts to this component of the Historic District as Alternative 1.

When considered in combination with other future projects, the proposed project's incremental contribution to impacts to the Historic District would be significant and unavoidable.

6.4. Biological Resources

Alternatives 1, 2, 3A and 6 would have less than significant environmental impacts, or have significant environmental impacts that would be reduced to less than significant levels with the incorporation of mitigation measures, in the area of biological resources.

Under Alternative 3, the subtransmission line would traverse a portion of the Stone Corral Ecological Reserve that supports more than three acres of vernal pool habitat where the existing Big Creek - Rector lines traverse the reserve. The removal of existing facilities, installation of new lines and the creation of access roads would directly impact more than three acres of northern claypan vernal pool habitat that is within designated critical habitat known to support special status plant and wildlife species. Project activities could permanently alter local hydrology in adjacent vernal pools with compounding indirect project effects on wetlands and water flow in surrounding portions of the reserve. While impacts would be reduced with mitigation, they would

remain significant and unavoidable following mitigation based on the extreme sensitivity of the Stone Creek Ecological Reserve to disturbance.

6.5. Unique Adverse Impacts (Alternative 3A)

The final EIR identified the following unique adverse impacts of Alternative 3A that have the potential to be significant: Alternative 3A would place the transmission line right of way within 50 feet of four private residences and surround a business on three sides, it would bisect several agricultural parcels contrary to sound land use planning practices, and it would encroach on a proposed development shown in Tulare County's draft General Plan.

Given its unique adverse impacts and modest reduction in impacts to farmland (Alternative 3A would remove 21 acres of farmland, which is only four acres less than the environmentally superior Alternative 2 (see Section 7, below)), the final EIR determined that Alternative 3A was not likely to provide a superior benefit over Alternative 2.

7. Environmental Superior Alternative

The EIR identifies Alternative 2 as the environmentally superior alternative.

While implementation of all of the proposed project alternatives would result in significant unavoidable impacts on cultural resources, the degree of variation between their impacts is not material enough to determine a preferred alternative on the basis of impacts on cultural resources.

With regard to agricultural resources, Alternative 3 would have the least impact among the project alternatives, removing 18.2 acres of farmland. However, Alternative 3 would not be environmentally superior due to its significant unavoidable impacts on biological resources.

Alternative 3A would have the next least impact on agricultural resources, removing 21.8 acres of farmland. However, Alternative 3A would not be environmentally superior due to its potentially significant adverse impacts related to its proximity to several residences and surrounding of a business, its bisection of agricultural parcels, and encroachment on a proposed development.

Alternative 2 would have the next least impact on agricultural resources, removing 25.6 acres of farmland. Alternative 6 would have a greater impact on agricultural resources than Alternative 2, removing 31.6 acres of farmland, and Alternative 1 would have the greatest impact on agricultural resources among the alternatives, removing 31.8 acres of farmland.

Alternative 2 is the environmentally superior alternative because it would result in only slightly greater impacts to farmland than Alternatives 3 and 3A but would not result in the significant or potentially significant impacts unique to Alternatives 3 and 3A.

8. Certification of EIR

CEQA requires the lead agency to certify that the EIR was completed in compliance with CEQA, that the agency has reviewed and considered it prior to approving the project, and that the EIR reflects the agency's independent judgment. As previously discussed, the EIR was completed after notice and opportunity for public comment on the scope of the environmental review and the draft EIR, as required by CEQA. The final EIR compiles and reflects all written and oral comments made on the draft EIR, and responds to them, as required by CEQA. The EIR identifies the proposed project's significant and unavoidable environmental impacts, mitigation measures that will avoid or substantially lessen them, and identifies Alternative 2 as the environmentally superior alternative. We have reviewed and considered the information

contained in the EIR, as well as parties' challenges to the adequacy of the EIR as discussed below. We certify that the EIR was completed in compliance with CEQA, that we have reviewed and considered the information contained in it, and that it reflects our independent judgment.

With respect to the parties' challenges to the EIR, we reiterate CEQA Guideline § 15151 which states in part, "Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." As discussed more fully below, the EIR fully reflects the parties' disagreements and responds to them appropriately, and thus is in compliance with CEQA.

8.1. Evaluation of Alternative 3A

PACE and the Kirkpatricks assert that the EIR inappropriately failed to evaluate Alternative 3A on the basis of its erroneous conclusion that the use of an abandoned railroad right of way for 4100 feet of the route is legally infeasible. Specifically, based on communications with the railroad's Western Region Property Manager, the final EIR determined that the right of way is owned by Rail America, who does not wish to sell it. PACE alleges that, according to its own investigation after the final EIR issued, the right of way is owned by Tulare Valley Railroad, which is quite willing to sell it. Putting aside this apparent factual discrepancy regarding ownership of the railroad right of way, the assertion that the EIR did not evaluate Alternative 3A is incorrect. To the contrary, the EIR reconfigured Alternative 3A to parallel the railroad right of way at issue, and evaluated the alternative under this reconfiguration to determine its impacts. The suggestion that the EIR misidentified Alternative 3A's unique adverse impacts as a result of misidentifying the railroad right of way's owners is likewise incorrect: The unique adverse impacts

identified in the EIR occur outside of the railroad right of way and therefore apply equally to both configurations.

Farm Bureau and Paramount Citrus assert that the EIR's reconfiguration of Alternative 3A unnecessarily increased impacts to agricultural resources. This assertion appears to incorrectly assume that the portion of Alternative 3A that would otherwise follow the railroad right of way would not cause agricultural impacts. To the contrary, regardless of whether it follows the railroad right of way or the land adjacent to it, that portion of the route would traverse lands that are almost entirely designated as prime farmland, unique farmland, or farmland of statewide importance.⁷ Thus, it is reasonable to assume that the difference between the configurations' agricultural impacts would be slight.

Farm Bureau, Paramount Citrus, Farmersville and the Kirkpatricks take issue with the EIR's determination that Alternative 3A's adverse environmental impacts are unique and that it is therefore unlikely to be superior to Alternative 2. Farm Bureau, Paramount Citrus and Farmersville contend that Alternative 3A's adverse impacts are not unique, but similar to other alternatives' impacts that the EIR found to be insignificant. To the contrary, the EIR adequately distinguishes Alternative 3A's adverse impacts from the similar impacts of other alternatives: Alternative 3A would place the transmission line in close proximity of four private residences and surround a business on three sides; Alternative 3A's right of way would pass within 50 feet of four residences while, at approximately 300 feet away, Alternative 2's right of

⁷ As shown by comparing the maps, or "road story," of Alternative 3 (Draft EIR, Appendix C, at 20 of 34) to the map of important farmlands (Draft EIR, Figure 4.2-1.)

way would be much farther removed from its three impacted residences. Alternative 3A would surround an existing business operation on three sides by transmission lines and structures, while Alternative 2 would have no similar adverse impact. Alternative 3A would diagonally bisect several agricultural parcels; while, as Paramount Citrus notes, Alternative 2 would also bisect several agricultural parcels, it would do so in parallel to parcel boundaries and, in many instances, following existing farm roads.⁸ Alternative 3A would encroach on eight parcels in a proposed development shown in Tulare County's draft General Plan; Alternative 1 would bisect a single (albeit the preferred) parcel for future development of a retail site. Given these distinctions, the Commission cannot reasonably assume that Alternative 3A's impacts are insignificant by comparison to Alternative 1.

The Kirkpatricks claim that the EIR's analysis of Alternative 3A demonstrates a biased, deliberate effort by its preparers to avoid meaningful participation and input by the public. As evidence of this claim of professional misconduct, the Kirkpatricks assert that there was practically no contact initiated by the EIR team to follow up with the public on their comments; that the EIR fails to demonstrate that SCE is legally prevented from using its alleged easement over the Stone Corral Ecological Reserve; that the EIR's analysis of Alternative 3A (as discussed previously) demonstrates lack of a reasonable and good faith undertaking; and that the EIR erroneously concludes that Alternative 3A would adversely impact, rather than enhance, the poultry business which it would surround on three sides. The Kirkpatricks do not

⁸ See Draft EIR, Appendix C, Section 1, at 17-24 of 27.

identify how, if at all, the EIR team's follow-up on public comments failed to comply with the requirements of CEQA. The Kirkpatricks do not identify how, if at all, SCE's alleged easement over the Stone Corral Ecological Reserve alters the proposed project's environmental impacts. As discussed previously, the EIR reasonably analyzed Alternative 3A. The Kirkpatricks' contrary opinion that surrounding the implicated business on three sides with transmission lines and structures is a positive, rather than negative, impact does not make the EIR inadequate (CEQA Guideline § 15151), much less demonstrate bias or misconduct. The Kirkpatricks' claims of bias and professional misconduct by the Commission's EIR team are entirely without merit.

Alternative 3A would not avoid or substantially lessen the project's significant impact to agricultural resources relative to the environmentally superior Alternative 2. Furthermore, it would cause unique adverse impacts that could potentially be significant. The EIR reasonably declined to fully evaluate Alternative 3A.

8.2. Analysis of Environmental Impacts

8.2.1. Paramount Citrus

Paramount Citrus asserts that the EIR did not adequately consider Alternative 2's impact on agricultural resources, particularly citrus. Paramount Citrus contends that, contrary to the assumption in the EIR, other crops including citrus trees cannot be productively farmed in the new right of way. As stated in the final EIR's response to Paramount Citrus's comments to this effect, all crops that are currently grown in Alternative 2's new right of way, including citrus, are currently grown in the existing Rector-Big Creek right of way. (Final EIR, Response O19-3 at 5-22.) Paramount Citrus's contention that this is

irrelevant and insubstantial evidence that crops can be grown in the new right of way is without merit.

Paramount Citrus asserts that the EIR is deficient because it did not address the economic effects of the proposed project's physical impacts to agricultural productivity within the proposed project's rights of way, as permitted by CEQA Guideline § 15131. To the contrary, the EIR considered the impact of the proposed project on agricultural production in the rights of way and determined that, with mitigation, it is insignificant. (Final EIR at G-17 - G-18.)

Paramount Citrus asserts that the EIR does not adequately inform the public or decision makers about the extent of the project's impact on agricultural irrigation because, while Mitigation Measure 4.7-11b requires SCE to adjust the proposed right of way to avoid existing wells, the EIR defers an inventory of the impacted agricultural wells until a later time. Paramount Citrus offers no basis for us to conclude that this level of analysis is inadequate. To the contrary, the EIR identifies the potential for the proposed project to interfere with agricultural irrigation, and identifies mitigation for it, thus providing a sufficient degree of analysis to enable us to intelligently take into account the proposed project's impact on agricultural wells. (See CEQA Guideline § 15151.)

With regard to the EIR's analysis of impacts to local hydrology, Paramount Citrus asserts that the EIR incorrectly assumes that groundwater conditions throughout the San Joaquin Valley are uniform and the entirety of the project area overlies the San Joaquin aquifer and disregards comments by certified hydrologists opining that Alternative 3 is generally within in the alluvial area. To the contrary, the EIR explicitly recognizes that the hydraulic properties

of the aquifer are heterogeneous and can vary notably. (Final EIR, Master Response on Groundwater at 4.4-2, and Response O18-1 at 5-19 – 5-20.)

Paramount Citrus asserts that the EIR offers no analysis in support of its conclusion that pole installation will not substantially impact groundwater flow under Alternatives 1, 2 and 6. To the contrary, the EIR provides ample analysis in support of this conclusion. (Final EIR, Master Response on Groundwater at 4.4-1 – 4.4-3.)

Paramount Citrus asserts that the EIR errs in concluding that Alternative 3 will have greater adverse impacts on groundwater hydrology than Alternative 2. This assertion misstates the EIR, which concludes that, with mitigation, *none* of the alternatives has a significant adverse impact on groundwater hydrology; the EIR does not compare the alternatives' relative, but less than significant, impacts, nor is it required to do so under CEQA.⁹

With respect to the EIR's conclusion that dewatering during construction will not cause a significant impact, Paramount Citrus asserts that the EIR fails to consider that the land surface and groundwater surface in the vast regional aquifer are located downhill from the shallow aquifers that will be impacted by construction of Alternatives 1, 2 and 6. To the contrary, the EIR explains that all the alluvial areas within the project area are part of the same aquifer system. (Final EIR, Response O18-4 at 5-20 – 5-21.)

⁹ This argument also appears to contradict Paramount Citrus's assertion that pole installation under Alternatives 1, 2 and 6 will have greater adverse impacts on groundwater resources than under Alternative 3.

8.2.2. Visalia

Visalia asserts that the EIR is inadequate because it did not analyze the proposed project's inconsistencies with Visalia's General Plan policies and goals. To the contrary and as the EIR explained, CEQA does not require this analysis as Visalia does not have jurisdiction over the proposed project.

(Final EIR, Response O25-7 at 5-98, and Response O10-8 at 5-10.)

Visalia cites to *Application of Pacific Gas and Electric Company (PG&E) for CPCN for Jefferson-Martin 230 kV Transmission Project (2004) D.04-08-046 (Jefferson-Martin)* and *Application of San Diego Gas & Electric Company (SDG&E) for CPCN for Sunrise Powerlink Transmission Project (2008) D.08-12-058 (Sunrise Powerlink)* in support of its assertion that, in practice, the Commission closely analyzes inconsistencies between projects and general plans and often adopts mitigation to avoid them. More precisely, while Jefferson-Martin and Sunrise Powerlink considered such inconsistencies, they did so, not in the context of the environmental review of impacts to land use policies, but rather in the context of community values and for purposes, not of requiring additional mitigation, but rather of selecting the route alternative. Likewise, we address Visalia's assertions of the proposed project's inconsistencies with its General Plan in this context of community values for purposes of selecting a route alternative, as discussed in Section 9, below.

Visalia asserts that, in analyzing the proposed project's negative impacts on the city's aesthetic resources, the EIR did not adequately document the city's scenic views of the Sierra Nevada Range, or depict the proposed project's visual contrast against them, from various vantage points in the city and public recreational areas. The final EIR fully reflects Visalia's assertions and provides a thorough and reasonable explanation of its analysis. (Final EIR,

Responses O25-9 through O25-15 at 5-99 – 5-107.) Visalia’s disagreement with the EIR’s analysis does not make the EIR inadequate. (CEQA Guideline § 15151.)

Visalia asserts that the EIR erroneously concludes there would be no impact because there are no “designated” scenic vistas in the vicinity of the proposed project. To the contrary, the EIR appropriately identified scenic resources (including scenic vistas) in two ways: by evaluating a visual resource’s visual quality, viewer types and volumes, and viewer exposure (Draft EIR at 4.1-1 – 4.1-2), and by identifying visual resources that have been designated as “scenic” in a city or county general plan or zoning ordinance (*id.* at 4.1-21 – 4.1-23). While the EIR did not identify any “designated” scenic vistas in the vicinity of the proposed project, it identified numerous scenic resources in the area and adopted mitigation measures to reduce the project’s adverse impact on them. (*Id.* at 4.1-38 – 4.1-52.)

Visalia notes that, independent of CEQA, Pub. Util. Code § 1002(a) imposes on the Commission the duty to consider the proposed project’s impacts to recreation resources and aesthetic values; Visalia asserts those impacts are highly relevant and must be mitigated “in this context.” To be sure, these impacts are highly relevant and we consider them. However, as set forth in the scoping memo for this proceeding and consistent with Commission precedent,¹⁰ we do so in the course of our environmental review pursuant to CEQA.

Visalia contends that the EIR is inadequate because it did not identify the impact of Alternatives 2, 3 and 6 on the planned River Run Ranch

¹⁰ *Application of Lodi Gas Storage for CPCN for Gas Storage Facilities (2000) D.00-05-048 (Lodi Gas Storage) at 28.* (“[T]he appropriate place for the parties to address [project’s

Footnote continued on next page

development as significant or, consequently, require mitigation to avoid or lessen it. Visalia presented evidence that these project alternatives will reduce the value of homes selling in this planned development by an estimated \$600,000 to \$1 million. Visalia asserts that this situation is similar to the situation in *Application of SCE for CPCN for Tehachapi-Vincent Transmission Project (2007) D.07-03-045 (Tehachapi-Vincent)*, in which the Commission found that the proposed transmission project would have impeded construction of a planned development and required alternative project routing to avoid that impact out of a concern about the associated adverse economic impact. More accurately, *Tehachapi-Vincent* found that the project alternative in question would have a significant and unavoidable impact on the planned residential development because it would preclude the use of land parcels within the new right of way. (*Tehachapi-Vincent* at 39-40.) Here, in contrast, the proposed project would not encroach on the planned development, and the EIR reasonably determined that the proposed project's proximity to the planned development does not cause a significant adverse impact; accordingly, no mitigation is required.

8.2.3. Farmersville

Farmersville asserts that the EIR did not adequately consider the economic and social impacts resulting from Alternative 1's bisection of the site of a planned commercial/industrial park in Farmersville because it inappropriately determines that the planned development is speculative. This assertion misstates the final EIR. In response to Farmersville's comments asserting that the transmission line's bisection of the site render it unsuitable for development, the

influence on environment] was in the EIR, so that the parties would not duplicate their efforts in both portions of the proceeding.”)

EIR explains why transmission lines are not incompatible with industrial and general development. (Final EIR, Response O10-7 at 5-10.) In response to a comment from William Pensar making the same assertion as Farmersville, the EIR states that *the commenter's assertion that Alternative 1 will render the site undesirable for the planned development* is speculative. (Final EIR, Response I66-2 at 6-37.) The EIR adequately assessed the economic and social impacts resulting from Alternative 1's bisection of the planned commercial/industrial park.

8.3. Sufficiency of Mitigation Measures

8.3.1. Paramount Citrus

Paramount Citrus asserts that revised Mitigation Measure 4.7-11b, which requires SCE to relocate wells that cannot be accommodated by adjusting the proposed right of way, is infeasible because it will be extremely difficult to locate sufficient well sites that will produce the same quantity and quality of water to be replaced, particularly in the bedrock areas of Alternatives 1, 2 and 6. Paramount Citrus argues that, as a result, those alternatives have a significant and unmitigated impact. The fact that a proposed mitigation measure may be difficult does not make it infeasible. Furthermore, it is speculative to assume that, in the event that SCE cannot adjust the proposed right of way to avoid existing wells, it will not be able to locate replacement well sites.

8.3.2. Farm Bureau

Farm Bureau recommends that, in consideration of Tulare County agricultural interests, the Commission should establish an agricultural advisory committee comprised of existing agricultural organizations, community based groups that have emerged as a result of the proposed project, other participants that have expertise in such areas as pest control, water well development and irrigation systems, and a limited number of individual growers; the committee

would be expected to avoid or resolve many conflicts and reduce unavoidable project impacts. As stated in the EIR, the formation of such a committee does not meet CEQA Guideline § 15126.4(a)(2)'s requirement that mitigation measures be fully enforceable through permit conditions, agreements, or other legally binding instruments. We address the reasonableness of Farm Bureau's recommendation in the context of our consideration of community values pursuant to Pub. Util. Code § 1002(a)(1) in Section 9, below.

Farm Bureau suggests that Mitigation Measure 4.7-11b requires revision in order to ensure its enforceability. Specifically, in the event that the project requires replacement of a groundwater well, Mitigation Measure 4.7-11b requires SCE to demonstrate that the new location is capable of producing water of equal quantity and quality. Farm Bureau, along with PACE, asserts that the measure should be revised to prohibit SCE from commencing construction until it satisfies this requirement, in order to meet the requirement of CEQA Guideline § 15091(d) that it be enforceable. The mitigation measure, as written, does not appear to be unenforceable, Farm Bureau and PACE do not articulate how or why it is unenforceable, and the recommended revision would unreasonably delay commencement and completion of the project. For these reasons, we reject Farm Bureau's and PACE's recommendation.

Farm Bureau notes that revised Mitigation Measure 4.3-1b requires SCE to obtain approval of its use of chemicals near agricultural areas from the Tulare County Farm Bureau, and submits that the correct authority is the Tulare County Agricultural Commissioner, who is tasked with the enforcement of state regulation of the safe use of pesticides. We make that correction.

Farm Bureau recommends that the Dispute Resolution Process contained in the mitigation program be revised to "provide for an expedited

resolution process” and to establish “a separate process and Commission designee [...] for time sensitive issues.” As written, the Dispute Resolution Process provides, as the first step in the event of a compliance dispute, the dispute shall be directed to the Commission’s designated project manager for informal resolution. In the event that informal resolution is unsuccessful, an affected party may seek resolution by the Commission’s Executive Director (the Executive Director or designee shall meet with the parties within 10 days of notice of dispute, and subsequently issue an Executive Director’s Resolution); if unsatisfied by the Executive Director’s Resolution, an affected party may appeal it to the full Commission. Step one of the Dispute Resolution Process provides a reasonable opportunity for speedy informal resolution by a Commission designee, which reasonably addresses Farm Bureau’s concern.

Farm Bureau takes issue with the mitigation measure addressing walnut productivity in the rights of way. Specifically, as walnut trees cannot be productive when cropped to the 15-foot height restriction for trees located within transmission rights of way,¹¹ Mitigation Measure 4.2-4 requires increasing the height of project structures to allow for a maximum walnut tree height of 30 feet to be maintained beneath the 220 kV conductor, which the EIR determines will mitigate this impact to a less than significant level. Farm Bureau asserts that this measure is as ambiguous as the 15-foot height restriction because it does not state if it is a maximum or minimum height. In view of our extensive experience with General Order 95 (initially adopted in 1941), we reject Farm Bureau’s assertion that the height restriction is ambiguous. Farm Bureau asserts that the measure

¹¹ See General Order 95.

unduly presumes that all walnut trees will maintain the same productivity level based on the same height. To the contrary, Mitigation Measure 4.2-4 explicitly recognizes that the pruning may reduce productivity to varying degrees and thereby result in an economic impact to farmers; those impacts would be addressed by SCE during its right of way acquisition process.

Farm Bureau asserts that the final EIR misinterpreted its comment addressing apiaries, and “reiterates the recommendation to notify landowners in advance of energization to ensure hives are adequately distanced during energization to avoid disruption.” To the contrary, Farm Bureau’s comment on the draft EIR makes no such recommendation. Its comment notes concern with the impact of power line electric fields generally on bees, recommends that SCE be required to survey the approved route to determine if apiaries will be potentially impacted, and suggests that this would be an impact on which its proposed agricultural advisory committee might beneficially consult. (Final EIR, Comment Letter 020, p. 10.) The EIR reasonably interpreted and responded to

Farm Bureau's comment.¹²

Farm Bureau suggests that Mitigation Measure 4.2-2, which requires SCE to obtain one acre of agricultural conservation easements for every acre of permanently converted farmland that is converted prime farmland, should be revised to mandate that SCE obtain those easements through an existing conservation bank. Farm Bureau offers no rationale for restricting SCE's options in this manner, and none is apparent to us. We reject Farm Bureau's recommendation.

8.3.3. Visalia

Visalia asserts that, in consideration of the community's values of maintaining its unique scenic vistas and small town characteristics and providing for orderly growth, open space and park lands, the EIR should require mitigation measures including the development of a landscaped, open space parkway, the formation of a conjunctive use committee, and other visual relief measures. The purpose of the EIR is to identify significant environmental impacts and measures, if any, to mitigate them. As discussed previously, the EIR properly determined that, as mitigated, the proposed project will not significantly impact Visalia's aesthetic resources or relevant land use policies. We address the issue of whether Visalia's recommendations are mandated by

¹² Farm Bureau suggests that this is an example of the type of process with which an agricultural advisory committee could assist. Although we do not require the establishment of an agricultural advisory committee as a condition of project certification, we invite Farm Bureau to bring these types of suggestions to SCE's attention throughout the construction process, and we expect SCE to be responsive to reasonable community concerns.

our consideration of community values pursuant to Pub. Util. Code § 1002(a)(1) in Section 9.2, below.

Visalia asserts that, consistent with General Order No. 131-D, Section XIV.B and *Application of SCE for CPCN for Devers-Palo Verde No. 2 Transmission Line Project (2007) D.07-01-040 (Devers-Palo Verde No. 2)*, the Commission should require SCE to consult with Visalia to resolve conflicts between the project and the city's General Plan. To the contrary, Section XIV.B does not mandate such consultations. Rather, Section XIV.B's mandate concerns jurisdictional disputes between the utility and local agencies. As the EIR correctly explains, while a utility project is not subject to local land use plans, it must obtain any required non-discretionary local permits; Section XIV.B requires the utility to consult with the local agency in the event that there is a dispute regarding whether such non-discretionary local land use permits are required. Accordingly, in *Devers-Palo Verde No. 2*, the utility and the tribal authority disputed whether the utility was required to obtain a conditional use permit for the tribal land, and the Commission appropriately adopted the mitigation measure that invoked Section XIV.B. (*Devers-Palo Verde No. 2* at 91-92.) In contrast, in this matter, there is no jurisdictional dispute between Visalia and SCE.

8.4. Identification of Environmentally Superior Alternative

SCE argues that Alternative 1 is the environmentally superior alternative because, while all of the alternatives require the same mitigation to address their potential impacts to cultural and agricultural resources, Alternative 1 is the only alternative that has no potential impact to biological resources. In its comments on the proposed decision, SCE elucidates its argument by stating that, as none of the alternatives avoids or substantially

lessens a significant impact to cultural or agricultural resources, they should be considered to be on par with respect to those impacts; and, as only Alternative 1 avoids the potential for biological impacts, it should be found to be superior to all other alternatives including those that, with mitigation, avoid or substantially lessen their potential biological impact. By this logic, an alternative that impacts a thousand acres of agricultural resources may be deemed to be on par with an alternative that impacts a single acre. Furthermore, it is not apparent that an alternative that never poses a potential environmental impact is environmentally superior to one that, with mitigation, succeeds in entirely avoiding it. We disagree that the Commission should (and CEQA permits it to) ignore the relative ultimate impacts of alternatives in identifying the environmentally superior alternative, and reject SCE's argument that Alternative 1 is the environmentally superior alternative.

9. Infeasibility of Environmentally Superior Alternative

9.1. Route Selection

9.1.1. SCE

SCE argues that all of the alternatives except Alternative 1 are infeasible in terms of being able to meet the project objectives in the necessary timely fashion. SCE asserts that there is an urgent need to address current reliability issues in the electrical service area. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 megawatts (MW), and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single-contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need

for rolling outages and/or customer blackouts in the area served by Rector Substation.

SCE asserts that all of the alternatives except Alternative 1 risk significant delay. First, all of the alternatives except Alternative 1 cross critical biological habitat, requiring environmental surveys that, according to SCE, could take two years to conduct. Furthermore, if the surveys determine listed species are present, SCE states that permitting could take an additional one to two years if a federal nexus establishes U.S. Army Corps of Engineers jurisdiction, or an additional five to 10 years if there is no federal nexus. Second, based on SCE's proposed labor resources and work schedule for the initial demolition and construction associated with the replacement of existing transmission infrastructure north of Rector Substation, Alternative 1 would involve approximately three months of outages as compared to 10, 13 and 8 months, respectively, for Alternatives 2, 3 and 6. In turn, these longer construction durations create a greater risk of further delay as the result of mitigation requiring SCE to avoid interfering with raptor nesting and optimum crop growing seasons. SCE testified that, while it might be possible to shorten the duration of construction activities by increasing the labor crews and extending the work schedule, this increase in construction activity may impact SCE's ability to successfully implement some of the necessary mitigation measures.

On the other hand, peak demand load has dropped since 2007, and the California Energy Commission's most recent adopted forecast of California energy demand projects SCE's per capita peak demand to remain relatively flat through the 2018 horizon without returning to the 2007 levels.¹³ While the risk that construction will be delayed to the extent SCE speculates is possible, it is also possible that any incremental delay will be much more modest. For example, as SCE notes, it is possible to accelerate construction by increasing labor crews and work schedules. Furthermore, it is possible and, according to SCE, even likely that permitting for Alternative 2 will be subject to the jurisdiction of the U.S. Army Corps of Engineers,¹⁴ which would not implicate the five to 10 year delay that SCE suggests might otherwise be required.

While "sooner" is certainly "better" with respect to addressing our current reliability concerns, we are keenly aware that, for practical purposes, a transmission line "is forever." On balance, we find that the need to address current reliability concerns does not render any of the alternatives infeasible.¹⁵

¹³ We grant PACE's request for official notice of the *California Energy Demand 2010-2020 Adopted Forecast*, California Energy Commission, CEC-200-2009-012 (December 2, 2009).

¹⁴ "Although uncertain at this time, impacts to vernal pool habitats or jurisdictional drainages resulting from construction of Alternative 2 would likely [be subject to the jurisdiction of the U.S. Army Corps of Engineers]." (Application 08-05-039, Proponent's Environmental Assessment, Section 4.4 at 4-118.)

¹⁵ SCE suggests that Alternative 1's significantly lower cost as compared to Alternative 2 is an important consideration to the identification of the environmentally superior alternative. To the contrary, economic impacts of a proposed project are not by themselves environmental impacts (CEQA Guideline § 15131) and therefore not relevant to the determination of the environmentally superior alternative. The appropriate context for consideration of this cost difference is with respect to project feasibility. (CEQA Guideline § 15091(a)(3).) However, SCE does not assert, and we do not find, that Alternative 2 is economically infeasible.

9.1.2. Farm Bureau

Farm Bureau asserts that the strong value that the community places on its high value orchard crops is cause to select the route alternative that minimizes impacts to those crops. To the extent that Farm Bureau means to suggest that the Commission should consider Alternative 2's economic impacts to the agricultural community, Farm Bureau does not assert, and we do not find, that the project's economic impact to orchard growers renders Alternative 2 infeasible. To the extent that Farm Bureau means to suggest that the community's relative support of an alternative is cause to select it, we do not view Pub. Util. Code § 1002(a)(1) as authorizing the selection of a project alternative on the basis of popularity. To the contrary, the issue is whether the project's impact will damage the community's character and identity. (See, e.g., *Lodi Gas Storage*, D.00-05-048 at 31-32, considering whether the presence of a natural gas storage facility would damage the community's winegrape growing reputation.) In this case, Farm Bureau does not assert, and we do not find, that Alternative 2 will damage community's character and identity as an agricultural community.

9.1.3. Farmersville

Farmersville objects to Alternative 1 because of its potential adverse impact on property values; its displacement of land designated for urban development that, in turn, would potentially be replaced with agricultural land; and its interference with the recreational opportunity afforded by a park and pond located along the transmission line route. Because we select Alternative 2, we do not reach this issue.

9.2. Additional Mitigation

Visalia and Farm Bureau invoke Pub. Util. Code § 1002(a)(1) as a basis to condition project certification on additional mitigation measures, regardless of the selected project alternative. Visalia recommends that, in consideration of the community's concerns regarding the proposed project's impact on Visalia's open-space values, recreation and aesthetics, the Commission should require SCE to develop and dedicate to the City a landscaped open space pathway under the transmission line; form a conjunctive use committee to identify landscaping and other measures for SCE to implement; and develop, in consultation with a designated visual specialist and Visalia, a visual relief plan that would specify appropriate structure surface treatments and vegetative screening. Similarly, Farm Bureau requests that, in consideration of the agricultural community's concerns, the Commission require the establishment of an agricultural advisory committee to provide input into the details of implementing the agricultural mitigation measures identified in the EIR.

We deny these requests. Visalia and Farm Bureau do not demonstrate and we do not find that Alternative 2, or any of the alternatives, damages the community's agricultural, recreational or aesthetic character. To the extent that it would be located in Visalia, the proposed project would lie within an existing transmission right of way, and the EIR appropriately determines that, with mitigation, the project's impacts to recreational and aesthetic resources are less than significant. While Alternative 2 will convert 25.6 acres of farmland to non-agricultural use, this cannot reasonably be found to thereby damage Tulare County's agricultural character.

Farm Bureau asserts that the mitigation monitoring, reporting and compliance program requires greater transparency, and recommends that it be

revised to provide that all landowners impacted by the project will be provided a copy of the dispute resolution procedures, compliance requirements, and SCE's plans and documentation submitted to the Commission. While Farm Bureau's further recommendation is unduly burdensome, it is reasonable to provide the impacted landowners with a copy of the mitigation monitoring, reporting and compliance plan. We direct Energy Division to serve the mitigation monitoring, reporting and compliance program on all landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

10. Overriding Considerations

Pursuant to CEQA Guidelines § 15093, the Commission may only approve a project that results in significant and unavoidable impacts upon a finding that there are overriding considerations. As discussed previously, this project is needed in order to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor. On June 24, 2004, the California Independent System Operator Board of Governors approved the looping of the Big Creek 3-Springville 220 kV transmission line into the Rector Substation as the preferred long-term transmission alternative to address identified reliability concerns. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 MW, and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need for rolling outages and/or customer blackouts in the area served by Rector Substation. For these reasons, we find that there are overriding considerations that support our adoption of the environmentally

superior project Alternative 2, despite its significant unavoidable impacts on agricultural and cultural resources.

11. EMF

The Commission has examined EMF impacts in several previous proceedings.¹⁶ We found the scientific evidence presented in those proceedings was uncertain as to the possible health effects of EMFs, and we did not find it appropriate to adopt any related numerical standards. Because there is no agreement among scientists that exposure to EMF creates any potential health risk, and because CEQA does not define or adopt any standards to address the potential health risk impacts of possible exposure to EMFs, the Commission does not consider magnetic fields in the context of CEQA and determination of environmental impacts.

However, recognizing that public concern remains, we do require, pursuant to GO 131-D, Section X.A, that all requests for a certificate of public convenience and necessity (CPCN) include a description of the measures taken or proposed by the utility to reduce the potential for exposure to EMFs generated by the proposed project. We developed an interim policy that requires utilities, among other things, to identify the no-cost measures undertaken, and the low-cost measures implemented, to reduce the potential EMF impacts. The benchmark established for low-cost measures is 4% of the total budgeted project cost that results in an EMF reduction of at least 15% (as measured at the edge of the utility right-of-way).

¹⁶ D.06-01-042 and D.93-11-013.

The proposed project, including Alternative 2, is designed to include the following no-cost and low-cost magnetic field reduction measures:

1. Use a double-circuit pole-head configuration for the proposed 220 kV lines;
2. Use poles which are 10 feet taller where homes are immediately adjacent to the edges of the right of way; and
3. Implement phasing arrangements to reduce magnetic field levels at the edges of rights of way.

This design plan is consistent with the Commission's EMF Design Guidelines and policies, and also with recommendations made by the U.S. National Institute of Environmental Health Sciences and applicable national and state safety standards for new electric facilities.

12. Project Cost

For projects estimated to cost more than \$50 million, Pub. Util. Code § 1005.5(a) directs the Commission to specify a reasonable and prudent maximum project cost. In its July 20, 2009, prepared testimony, SCE forecasted the cost of Alternative 2 to be \$137.443 million (in constant 2009 dollars excluding Allowances for Funds Used During Construction (AFUDC)). This is based on direct costs of \$97.907 million plus a 30.6% contingency (\$29.947 million), plus Pensions & Benefits and Administrative & General costs (\$9.589 million). SCE notes that this figure does not take into account costs that may be required due to mitigation not identified at the time or final engineering, and requests the opportunity to update its cost estimate by advice letter once final engineering is complete.

Farm Bureau challenges the reasonableness of SCE's forecast of Alternative 2's costs for its use of a 30.6% contingency. Farm Bureau cites to

Tehachapi Renewable, D.09-12-044, which rejects SCE's proposed 35% contingency in that application, and instead adopts a 15% contingency, as follows:

SCE requests contingency costs equal to 32% of total project costs excluding AFUDC, P&B, A&G costs. We believe this is too high for several reasons. First, the Project consists primarily of new transmission and substation facilities. California electric utilities and their construction contractors have extensive experience with this type of project.

In light of the extensive experience of California electric utilities and their industry partners in constructing transmission lines and substations, we are not convinced that a contingency of 32% is reasonable. Generally, by the time an electric utility files an application for authority to construct a power line or substation, the utility should know the final cost of the proposed project to within 15%. This is particularly true for the Project given that it will be constructed largely on existing rights of way. There should be little uncertainty regarding the cost to acquire land and rights of way for the project, and SCE has had access to most or all of route for planning, design, and engineering purposes.

Second, we believe that SCE's contingency of 32% is excessive in the current economic environment. A major purpose of SCE's contingency is to budget for the risk of significant increases in the cost of labor and materials. We believe this risk is small given that the unemployment rate in California is more than 12% and construction activity in the State is at recessionary levels. It is difficult to imagine a credible scenario where the cost of labor and materials increases by 32% over the course of the Project. In our opinion, a contingency of 15% for labor and materials is sufficient under present economic circumstances.

Finally, a contingency of 15% is consistent with Commission precedent. For example, D.08-12-058

adopted a contingency of 18.35% for SDG&E's Sunrise Powerlink Project, D.07-01-040 adopted a contingency of "almost 15%" for SCE's Devers-Palo Verde No. 2 Project, and D.01-12-017 adopted a contingency of 14.6% for PG&E's Northeast San Jose Project.

(*Tehachapi Renewable* at 70-71, citations omitted.)

Tehachapi Renewable went on to adopt the 15% contingency, but authorized the utility to seek an adjustment of the maximum reasonable and prudent costs once it had developed a final detailed engineering design-based construction estimate for the approved project route. (*Id.* at 90-91 and Conclusion of Law 26.)

This rationale applies equally to the facts of this application: SCE is experienced in constructing transmission lines and substations, Alternative 2 will be constructed largely on existing rights of way, and California unemployment remains high. For these reasons, we adopt a contingency of 15%, and apply it to the forecasted direct cost of \$97.907 million. We adopt as reasonable and prudent a maximum cost of \$122.182 million (excluding AFUDC). Once SCE has developed a final detailed engineering design-based construction estimate for Alternative 2, SCE may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to § 1005.5(b).

13. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on May 24, 2010, by SCE, PACE, Visalia, Farm Bureau, and Paramount Citrus. Reply comments were filed on June 1, 2010, by SCE, Farm Bureau, and Paramount Citrus. We have considered the comments and, to

the extent that they identified factual, legal or technical error in the proposed decision, we have made appropriate changes.

14. Assignment of Proceeding

Dian M. Grueneich is the assigned Commissioner and Hallie Yacknin is the assigned ALJ in this proceeding.

Findings of Fact

1. Construction of a 220 kV transmission line to loop to the Big Creek 3-Springville 220 kV transmission into the Rector Substation is necessary in order to address reliability concerns in the Big Creek Corridor.

2. Project Alternatives 1, 2, 3, 3A and 6 would each have significant unavoidable impacts on agricultural and cultural resources.

3. Project Alternatives 1, 2, 3, 3A and 6, respectively, would permanently remove 31.9 acres, 25.6 acres, 18.2 acres, 21.8 acres and 31.6 acres of prime farmland, unique farmland, and farmland of statewide importance as that farmland is defined by the Department of Conservation.

4. In addition to its significant unavoidable impacts on agricultural and cultural resources, Alternative 3 would have significant unavoidable impacts on biological resources.

5. In addition to its significant unavoidable impacts on agricultural and cultural resources, Alternative 3A would have potentially significant and unavoidable impacts on land use and aesthetic resources.

6. Alternative 2 is the environmentally superior alternative.

7. The EIR was completed in compliance with CEQA.

8. The Commission has reviewed and considered the information contained in the EIR.

9. The EIR reflects the Commission's independent judgment.

10. Alternative 2 is feasible.

11. The need to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor is an overriding consideration that supports our approval of Alternative 2, despite its significant unavoidable impacts. As such, the benefits of Alternative 2 outweigh and override its significant and unavoidable impacts.

12. Alternative 2 includes no-cost and low-cost measures (within the meaning of D.93-11-013, and D.06-01-042) to reduce possible exposure to EMF.

13. The reasonable and prudent cost of Alternative 2 is \$122.182 million.

Conclusions of Law

1. SCE should be granted a CPCN for Alternative 2 of the proposed San Joaquin Cross Valley Loop Transmission Project, with mitigation set forth in the Mitigation Monitoring, Reporting and Compliance Program (MMRCP), which is attached as Attachment 1 to this decision.

2. Mitigation Measure 4.3-1b of the MMRCP should be revised to require SCE to obtain approval of its use of chemicals near agricultural areas from the Tulare County Agricultural Commissioner, as opposed to the Tulare County Farm Bureau.

3. Energy Division should be directed to serve the MMRCP on all landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

4. The EIR has been completed in compliance with CEQA and should be certified.

5. The maximum cost of the project should be set at \$122.182 million, excluding AFUDC.

6. Once SCE has developed a final detailed engineering design-based construction estimate for Alternative 2, SCE may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to § 1005.5(b).

7. The unopposed October 2, 2009, motion of SCE to correct the transcript of the August 31, 2009, evidentiary hearing and the unopposed motion of Paramount Citrus to accept its late-filed opening brief should be granted.

8. A.08-05-039 should be closed.

9. This order should be effective immediately.

O R D E R

IT IS ORDERED that:

1. Southern California Edison Company is granted a Certificate of Public Necessity and Convenience to construct the San Joaquin Cross Valley Loop Project Alternative 2 in conformance with the Mitigation Monitoring, Reporting and Compliance Plan, which is attached as Attachment 1 to this decision.

2. The final Environmental Impact Report (which incorporates the draft Environmental Impact Report) is adopted pursuant to the requirements of the California Environmental Quality Act.

3. Mitigation Measure 4.3-1b of the Mitigation Monitoring, Reporting and Compliance Plan is revised to require Southern California Edison Company to obtain approval of its use of chemicals near agricultural areas from the Tulare County Agricultural Commissioner, as opposed to the Tulare County Farm Bureau.

4. The Mitigation Monitoring, Reporting and Compliance Plan, as modified in Ordering Paragraph 3 and which is attached to this decision, is adopted.

5. Energy Division shall cause a copy of the Mitigation Monitoring, Reporting and Compliance Plan to be served on all identified landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

6. The maximum cost of the project is set at \$122.182 million, excluding Allowances for Funds Used During Construction.

7. Once it has developed a final detailed engineering design-based construction estimate for Alternative 2 of the San Joaquin Cross Valley Loop Transmission Project, Southern California Edison Company may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to Public Utilities Code Section 1005.5(b).

8. Application 08-05-039 is closed.

This order is effective today.

Dated July 29, 2010, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
NANCY E. RYAN
Commissioners

I reserve the right to file a dissent.

/s/ TIMOTHY ALAN SIMON
Commissioner

I dissent.

/s/ JOHN A. BOHN
Commissioner

ATTACHMENT 1

ATTACHMENT 2

ABAA VISALIA RANCH L P
15430 RD 296
VISALIA, CA 93292

ADAMS, DANIEL S & CYNTHIA A
33251 RD 148
VISALIA, CA 93291

ADNEY, BRIAN & JODY (TRS)
35599 RD 150
VISALIA, CA 93292

AKIN, BRUCE G & DENISE M
32950 RD 148
VISALIA, CA 93292

ALCAZAR, HOMERO & VERONICA
1520 SO RIO LINDA ST
VISALIA, CA 93292

ALSING, JUDY
14851 AVE 312
VISALIA, CA 93292

ALTER, ROGER C & SUSAN E
14765 AVE 296
VISALIA, CA 93292

DANA, WARREN
1840 S CENTRAL AVE
VISALIA, CA 93277

REAL PROP & ADMIN SVCS
P O BOX 410
LONG BEACH, CA 90801

AVILA, FIDENCIO P & YOLANDA M
1534 S RIO LINDA
VISALIA, CA 93292

AWBREY, JOSHUA
310 NO ARROYO ST
VISALIA, CA 93292

AYRES, MICHAEL & ALISA
4419 E WILDWOOD CT
VISALIA, CA 93292

BENBOW, WINONA A (TR EXPT TR)
8700 SO BUTTE RD
SUTTER, CA 95982

BENEDICT, RICHARD G & ILA M
31345 TOWER RD
VISALIA, CA 93292

BENITE,Z JOSE A & MARICELA
206 N ARROYO ST
VISALIA, CA 93292

BERRY, JOE F & NANCY
32077 RD 144
VISALIA, CA 93292

BJ NUT FARM LLC
15832-C MILLS DR
VISALIA, CA 93292

BLAIN FARMING CO INC
P O BOX 507
VISALIA, CA 93279

BLANKENSHIP, JACK L
31350 N TOWER RD
VISALIA, CA 93292

BOROWSKI, JANE
31231 TOWER RD
VISALIA, CA 93291

BOS, H ANTHONY
14722 AVE 328
VISALIA, CA 0

BRATSCH, PAUL J & DORIS J
31174 TOWER ROAD
VISALIA, CA 93291

BRIDGES, ROGER E & AUDREY L (TRS)
29002 RD 156
VISALIA, CA 93292

BRITTAIN, DELBERT E & MARY E (TRS)
14797 D AVE 296
VISALIA, CA 93292

BROOKSHIRE, JACK D & JOANN
31190 N TOWER RD
VISALIA, CA 93291

BROWN, DONALD L & ANGELA M
31255 TOWER RD
VISALIA, CA 93292

BURGER, HAROLD DEAN & JULIE
31031 TOWER RD
VISALIA, CA 93291

C/O BRYON FOX
14608 AVE 328
VISALIA, CA 93292

C/O CLARINDA J HART
18400 AVE 352
WOODLAKE, CA 93286

C/O CLAUDE E ATKINS
15430 AVE 296
VISALIA, CA 93292

C/O GEORGE J PERRY (TR)
6343 W MINERAL KING AVE
VISALIA, CA 93291

C/O JAN SMITH
707 W ACEQUIA
VISALIA, CA 93291

C/O LOUIS WHITENDALE
15199 AVE 292
VISALIA, CA 93292

C/O PARAMOUNT CITRUS ASSOC
1901 S LEXINGTON ST
DELANO, CA 93215

C/O PCA-NE315
1901 S LEXINGTON
DELANO, CA 93215

C/O PCA-NE315
5001 CALIFORNIA AVE #230
BAKERSFIELD, CA 93309

C/O ROLL INTERNATIONAL CORP
11444 W OLYMPIC BLVD 10TH FL
LOS ANGELES, CA 90064

C/O SANDRA T ROSALES (TR)
3361 BAGLEY AVE UNIT #15
LOS ANGELES, CA 90034

CALDERON, OSMIN
30923 TOWER RD
VISALIA, CA 93291

CALVIN INC
PO BOX 5379
FRESNO, CA 93755

CARTER, TOMMY & KIM L
1142 SO RIO LINDA ST
VISALIA, CA 93292

CASTLEWOOD PARTNERS INC
P O BOX 2622
VISALIA, CA 93292

CENTEX HOMES
1840 S CENTRAL AVE
VISALIA, CA 93277

CENTRAL VALLEY RANCH
2216 HYDE AVE
VISALIA, CA 93291

CHARTER OAK CORPORATION
411 N SUTTER COURT
VISALIA, CA 93291

CLEMENTS, HAROLD & LEONA (TRS)
891 S MC AULIFF RD
VISALIA, CA 93292

CLEMENTS, PEGGY (TR)
891 S MC AULIFF
VISALIA, CA 93292

COLEY, JAMES R
30971 TOWER RD
VISALIA, CA 93292

COLUCCI, ANTONIO F & ROSE C
33150 RD 132
VISALIA, CA 93292

CONTRERAS, FELIPE DE JESUS & HERMILL
4438 E DOUGLAS CT
VISALIA, CA 93292

COOPER, CHRISTOPHER
1416 S RIO LINDA CT
VISALIA, A 93292

COTTLE, WILLIAM L
P O BOX 1012
EXETER, CA 93221

COVE RANCHES LP
2216 HYDE AVENUE
VISALIA, CA 93291

COX, PHILLIP R
1328 S RIO LINDA CT
VISALIA, CA 93277

D & J FARMS
34441 RD 176
VISALIA, CA 93292

DANIEL, ELDON
100 WILLOW PLAZA SUITE 400
VISALIA, CA 93291

DAVIS, ALICE PATRICIA
4414 E CECIL CT
VISALIA, CA 93291

DAVIS, DAN & KATHY
4411 E CECIL CT
VISALIA, CA 93291

DAVIS,LARRY & ALICE P
4414 E CECIL CT
VISALIA, CA 93292

DE JONG, ARIE & BRENDA
37455 RD 144
VISALIA, CA 93292

DE JONGE, NEIL S & CARLA G
31142 TOWER RD
VISALIA, CA 93291

DEAN, ZACHARY D
1126 S RIO LINDA ST
VISALIA, CA 93292

DEIMLER, JAMES D & JULIA
14723 AVE 344
VISALIA, CA 93291

DENNIS, BRUCE M & SHARYN D
37319 RD 192
WOODLAKE, CA 93286

DEPT OF INTERIOR - W & P R S
2800 COTTAGE WAY
SACRAMENTO, CA 95825

DIR, DALE B & BILLIE
P.O. BOX 10447
BAINBRIDGE ISLAND, WA 98110

DOUGLASS, RONALD W & BEVERLY J
(TRS)
30955 TOWER RD
VISALIA, CA 93292

DOWLING, H WILLIAM & VIRGINIA O
35599 1/2 ROAD 150
VISALIA, CA 93291

DREO, JAMES & WYONELL J
32951 RD 148
VISALIA, CA 93292

DUGGER, JAMES T & MARCIA L
14797 A AVE 296
VISALIA, CA 93292

DURHAM, CECIL & CHRISTINE
1706 S MICHAEL CT
VISALIA, CA 93292

DUVALL, DORIS
4428 E CECIL CT
VISALIA, CA 93292

ECKER, AARON & GINA
4330 E COLLEGE AVE
VISALIA, CA 93292

ECKES, GREGORY J & JEANNE
4423 E SYCAMORE CT
VISALIA, CA 93282

EGGLESTON, WILLIAM A & BOBBIE S
35599 ROAD 150 APT A
VISALIA, CA 93291

ENNIS LAND DEVELOPMENT LLC
643 N WESTWOOD ST
PORTERVILLE, CA 93257

EREDIA, JOSE B & CATHERINE M
14852 AVE 312
VISALIA, CA 93291

ERMIE, PAUL & ANDREA
31365 TOWER RD
VISALIA, CA 93292

ERNE, CHARLES A & HELEN A
14844 LIPSON AVE
VISALIA, CA 93292

ESTABROOKS, BRIAN & SHERRY
14870 AVE 360
VISALIA, CA 93291

EVANS, JUDITH L (SCSR TR)
248 E EVERGREEN
VISALIA, CA 93277

FIFE, RUBY E (TR)
34922 RD 152
VISALIA, CA 0

FLORES, JOE E
5788 LAWRENCE AVE
DINUBA, CA 93618

FORD, GLORIA
4432 E ROOSEVELT CT
VISALIA, CA 0

FOX, BYRON & KELLY
14608 AVE 328
VISALIA, CA 93291

FRY, STEVE A & SHAUNA
28868 RD 148
VISALIA, CA 93292

FULTON, WESLEY MONROE & FLORENCE
ELV
4410 E DOUGLAS AVE
VISALIA, CA 93292

FUMIA, JOHN C & CATHERINE R (TRS)
1736 LAURELWOOD DR
San Jose, CA 95125

GARCIA, ALEXANDER & TERESA
14890 AVE 296
VISALIA, CA 93292

GARCIA, VAL
4433 E ROOSEVELT CT
VISALIA, CA 93292

GARRIDO, FRANCISCO P & INEZ P
836 S RIO LINDA ST
VISALIA, CA 93292

GATEWOOD, HENRY L
4420 E GROVE CT
VISALIA, CA 93292

GOMES, RICHARD J & BETTY L (TRS)
31121 TOWER RD
VISALIA, CA 93291

GONZALES, FERNANDO & MARYHELEN
1530 S RIO LINDA ST
VISALIA, CA 93292

GOOCH, DELILA R
14850 AVE 313
VISALIA, CA 93292

GORDEN, JAMES M & MARY A
P O BOX 44066
LEMON COVE, CA 93244

GRAVES, KURT & VICTORIA L
914 SO RIO LINDA ST
VISALIA, CA 93292

GRAY, CRECENCIA (SURV TR)
30907 TOWER RD
VISALIA, CA 93292

GREEN, IRA
15440 W LONGBOW DR
SHERMAN OAKS, CA 0

GUILLEN, RAYMOND T & SANDRA
4433 E SYCAMORE CT
VISALIA, CA 93292

GUTIERREZ, CHRISTOPHER J & NICOLE D
1608 E MONTE VISTA CT
VISALIA, CA 93277

GUTIERREZ, JORGE
500 NO ARROYO ST
VISALIA, CA 93292

GUTIERREZ, MANUEL OLIVA
31175 TOWER RD
VISALIA, CA 93292

GUTIERREZ, OMAR & MARIA
1444 TAMPICO AVE
SALINAS, CA 93906

HACOBIAN, DARWIN
19839 AVENUE 364
WOODLAKE, CA 93286

HAGGARD, GERALD C & KIM B
31081 TOWER RD
VISALIA, CA 93291

HAMILTON, STEVEN D
610 N COMSTOCK CT
VISALIA, CA 93292

HANCOCK, JON & KIMBERLEY
325 NO ARROYO ST
VISALIA, CA 93291

HANSON, MATTHEW A & GRACE
4416 E ROOSEVELT CT
VISALIA, CA 93292

HARPER, STEVE L & ANNE
4432 E RACE AVE
VISALIA, CA 93292

HARRELL, WENDELL H & WILMA J
31217 TOWER RD
VISALIA, CA 93291

HART, NORMAN & BARBARA (TRS)
14167 AVE 320
VISALIA, CA 93292

HART, ROBERT EARL
33857 ROAD 160
VISALIA, CA 93292

HASH, EULA MAE
15093 AVE 280
VISALIA, CA 93292

HAURY, JAMES O & PATRICIA M (TRS)
5704 W SWEET DR
VISALIA, CA 93291

HENGST, ROBERT H & LINDA L (TRS)
37900 MILLWOOD AVE
WOODLAKE, CA 93286

HENRY, ROBERT & SHELLY
324 NO ARROYO ST
VISALIA, CA 93292

HERNANDEZ, BERTHA E
846 S RIO LINDA
VISALIA, CA 93292

HERNANDEZ, OFELIA
P O BOX 107
WOODLAKE, CA 93286

HIGBEE, RICHARD E & DOROTHY J
4422 E MC KINLEY AVE
VISALIA, CA 93292

HILL, JAMES K
4425 E GROVE CT
VISALIA, CA 93292

HILVERS, NICKOLAS J JR & TRICIA
28852 RD 1480
VISALIA, CA 93292

HORNUNG, CRAIG S
3324 S JACKIE ST
VISALIA, CA 93277

HOUSMAN, JEFF & MARILYN
14935 AVE 312
VISALIA, CA 93292

HUGHES, THOMAS B & BEVERLEY G (TRS)
31357 TOWER RD
VISALIA, CA 93291

HUNSAKER, EDWARD B & JANET M
4344 E MEADOW LANE
VISALIA, CA 93292

HUSSMAN, RICHARD L
4434 E SYCAMORE CT
VISALIA, CA 93292

HUTCHERSON, JERRY & DEBRA L
31183 TOWER RD
VISALIA, CA 93291

HUTSON, JUDY ANNE
1108 S RIO LINDA
VISALIA, CA 93292

IBARRA, JORGE
1619 SOUTH 79TH LANE
PHOENIX, AZ 85043

INGRAM, WILLIAM G & JOYCE J (TRS)
3913 COUNTRY CLUB DR
LAKEWOOD, CA 90712

IRACHETA, VICENTE & GRACIA
438 NO ARROYO ST
VISALIA, CA 93292

JEFFERS, SUSAN L
804 POMEROY RD
NIPOMO, CA 93444

JENKINS, DUSTIN & KRISTINA M
4310 E LAUREL
VISALIA, CA 93291

JERNAGAN, WAYNE & SHERRIE
4402 E ROOSEVELT CT
VISALIA, CA 93292

JIMENEZ, LOUIS & LIZA M
4437 E MCKINLEY AVE
VISALIA, CA 93292

JIMENEZ, SIMON & MARIBEL
1526 S RIO LINDA ST
VISALIA, CA 93292

JOHN & ELEANOR BENETTI CO-TRS
1509 SAN ARDO DR
San Jose, CA 95125

JOHNSON, ALAN L & TRUDY C (TRS)
19109 AVE 300
EXETER, CA 93221

JOHNSON, C PAUL & SHIRLEY E (TRS)
31618 RD 148
VISALIA, CA 93291

KHAMNEUNGTHAL, VIENGXAY
414 N ARROYO ST
VISALIA, CA 93292

KING, GERALD D & LINDA A
31273 TOWER RD
VISALIA, CA 93292

KONG, DENNY M
210 NO ARROYO ST
VISALIA, CA 93292

KOSTER, DOUGLAS E & MARSHA J
3124 STEVENSON DR
PEBBLE BEACH, CA 93953

KUECHEL, ANNETTE MARIE
37297 RD 192
WOODLAKE, CA 93286

LAMBERT, CHRIS & ERIN E
920 SO RIO LINDA ST
VISALIA, CA 93292

LANDERS, LOREEN
28908 RD 148
VISALIA, CA 93292

LANGDON, RICHARD E JR
31173 TOWER RD
VISALIA, CA 93292

LARSEN, RICHARD M & MARY ANN (TRS)
P O BOX 22127
SAN DIEGO, CA 92192

LEE, BRENDA J
1544 S RIO LINDA ST
VISALIA, CA 93292

LEE, CHER
301 NO ARROYO ST
VISALIA, CA 93292

LEE, SARN
4405 E MCKINLEY
VISALIA, CA 93292

LEWIS, JOHN W & CHRYSTAL R
31203 TOWER RD
VISALIA, CA 93292

LOCKE, ROBERT E & KARON R
31001 TOWER RD
VISALIA, CA 93291

LOPEZ, ROSENDO N & MARTHA M
30939 TOWER RD
VISALIA, CA 93292

LORENTZEN, PAUL C (TR)
2627 E PRINCETON
VISALIA, CA 93292

LOZA, FILIBERTO & ERNESTINA D
1510 S RIO LINDA ST
VISALIA, CA 93292

LUCAS, EARL E (TR)
31181 TOWER RD
VISALIA, CA 93291

LUNA, CHRISTOVAN E
4430 E OAK AVE
VISALIA, CA 93292

LY, TAM
221 NO ARROYO ST
VISALIA, CA 93292

LYNCH, MICHAEL J & PATRICIA J
4422 E DOUGLAS AVE
VISALIA, CA 93292

MANES, WALTER S & DOROTHY E
30985 TOWER RD
VISALIA, CA 93291

MARSH, RICHARD & MICHELE
4338 E COLLEGE AVE
VISALIA, CA 93292

MARTINEZ, GLORIA
31280 TOWER RD
VISALIA, CA 93292

MARTINEZ, TINA M & RAY S
1030 SO RIO LINDA ST
VISALIA, CA 93292

MC BRIDE, NANCY
826 S RIO LINDA ST
VISALIA, CA 93292

MC NALLY, INVESTMENTS A CA CORP
1805 W MAIN
VISALIA, CA 93291

MEDINA, JOSE LUIS & JUANA
1430 S RIO LINDA CT
VISALIA, CA 93292

MEDLOCK, RONNIE G & ANTONETTE
14725 AVE 296
VISALIA, CA 93292

MILLER, TIM & JERUSHA
2944 E PERSHING CT
VISALIA, CA 93292

MIRTORABI, MASOUD
20058 VENTURA BLVD #124
WOODLAND HILLS, CA 91364

MORAN, FRANCISCO
3 INGRAHAM CT
WATSONVILLE, CA 95076

NEWBERRY, ELROY R & LUPE A
36667 RD 148
VISALIA, CA 93292

NEWBERRY, RUBY I (TR)
36777 RD 148
VISALIA, CA 93292

NGUYEN, THO VAN
2424 OLD CREST PLACE
San Jose, CA 0

NIBLETT, STEPHEN R & TERESA K
4626 W WALNUT AVE
VISALIA, CA 93277

NIETO, OMAR GARCIA
100 NO ARROYO ST
VISALIA, CA 93292

NORTHAM, PATRICIA B (TR)
31161 TOWER RD
VISALIA, CA 93291

NUNES, TONY A & MARY A
4436 E MC KINLEY AVE
VISALIA, CA 93292

OAKES DITCH COMPANY
P O BOX 366
FARMERSVILLE, CA 93223

OLMOS, DOMINGO & ALICE (TRS)
1020 RIO LINDA ST
VISALIA, CA 93292

PADRON, GILBERT & ELVIA
4413 E GROVE CT
VISALIA, CA 93292

PAREGIEN, CHARLES C JR & BARBARA R (
14637 AVE 336
VISALIA, CA 93292

PAREGIEN, STEVEN D & KERI L
15080 AVE 336
VISALIA, CA 93292

PARKS, RICHARD A & JEANETTE A
31329 TOWER RD
VISALIA, CA 93291

PELTZER, BARBARA A (TR)
34286 RD 188
WOODLAKE, CA 93286

PELTZER ENTERPRISES GEN PNP
17396 AVE 344
VISALIA, CA 93292

PELTZER GROVES INC
34286 RD 188
WOODLAKE, CA 93286

PEREZ, OCTAVIO & LUCY
P O BOX 2589
WATSONVILLE, CA 95077

POLICH, THOMAS H & THERESA J (TRS)
31045 TOWER RD
VISALIA, CA 93291

POTTS, MICHAEL R
36680 MILLWOOD DR
WOODLAKE, CA 93286

PULLIN, JASON & KARRY
1136 SO RIO LINDA ST
VISALIA, CA 93292

PUTNAM, TIMOTHY & TORY D
4418 E WILDWOOD CT
VISALIA, CA 93292

RABB BROS RANCH INC
P O BOX 736
SAN JOAQUIN, CA 93660

RABB FARMS LLC
P O BOX 736
SAN JOAQUIN, CA 93660

RAMIREZ, HUGO & LYNETTE M (CO-TRS)
28687 RD 148
VISALIA, CA 93292

RAMIREZ, NICOLAS & SAN JUANA
31315 TOWER RD
VISALIA, CA 93292

REYNOSO, BENJAMIN & LORENE
36612 ROAD 148
VISALIA, CA 93291

REYNOSO, FRANK
6038 N SPALDING
FRESNO, CA 93710

REYNOSO, JOSEPH D & CONCEPCION G
36646 ROAD 148
VISALIA, CA 93291

RICO, EDDIE
123 NO ARROYO ST
VISALIA, CA 93292

RITCHIE, DOYLE & WANDA
P O BOX 3191
VISALIA, CA 93278

ROBLES, JAIME & OLGA I
4421 E DOUGLAS AVE
VISALIA, CA 93292

RODRIGUEZ, BELIA
1440 SO RIO LINDA CT
VISALIA, CA 93291

RODRIGUEZ, JAVIER JR & RHONDA
4440 E CECIL CT
VISALIA, CA 93292

RODRIGUEZ, MIGUEL A & CHRISTIE L
313 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, REFUGIO & IMELDA
111 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, SAUL & CHRISTINA
4439 E CECIL CT
VISALIA, CA 93292

ROSALES, JENNIFER A & JORGE A
1540 S RIO LINDA ST
VISALIA, CA 93292

ROSE, HUDSON S & ELIZABETH J
P O BOX 36
YETTEM, CA 93670

RUVALCABA, ANNETTE
4427 E RACE AVE
VISALIA, CA 93292

SABAN, GENALYN
110 NO ARROYO ST
VISALIA, CA 93292

SALDANA, MARCELLO
2505 E GOSHEN AVE
VISALIA, CA 93292

SANCHEZ, AARON
1840 SO JULIE ANN
VISALIA, CA 93277

SANCHEZ, GUILLERMO & BERTHA (TRS)
4435 E WILDWOOD CT
VISALIA, CA 93292

SANCHEZ, JIM & DARLENE
402 NO ARROYO
VISALIA, CA 93292

SANGHA, SUKHDEV S & SEWA K
1604 S RIO LINDA ST
VISALIA, CA 93292

SANTELLAN, RUBEN D & ANITA M
4404 E WILDWOOD CT
VISALIA, CA 93291

SCHNEIDER, GERALD M & NANCY L
33651 RD 148
VISALIA, CA 93291

SCHNEIDER, PATRICIA R (TR)
846 N CHINOWTH
VISALIA, CA 93291

SCOTT, DANIEL J
1100 S RIO LINDA
VISALIA, CA 93292

SELIG, MARK
222 NO ARROYO ST
VISALIA, CA 93292

SHAWL, ROBERT M
33753 RD 188
WOODLAKE, CA 93286

SHIMAJI T, TOM & JUNE
14851 AVE 360
VISALIA, CA 93292

SHOCKENCY, GLENN & VALERIE
510 NO ARROYO ST
VISALIA, CA 93292

SILVEIRA, JOE N & MARIA F (TRS)
4417 E ROOSEVELT CT
VISALIA, CA 93292

SLOVER, FRED G & BONNIE (TRS)
15302 AVE 288
VISALIA, CA 93292

SLOVER, RAY S (TR)
14840 AVE 288
VISALIA, CA 93292

SOTO, JESUS R
4411 E DOUGLAS ST
VISALIA, CA 93292

SOUTHERN CALIFORNIA EDISON COMPANY
P O BOX 800
ROSEMEAD, CA 91770

STANIC, MUROSLAV M & KATARINA
5601 W HILLSDALE
VISALIA, CA 93291

STONE CORRAL IRR DIST
37656 RD 172
VISALIA, CA 93291

STROBEN, THOMAS S & LORETTA (TR)
31191 TOWER RD
VISALIA, CA 93291

SUAREZ, IRENE
4429 E OAK AVE
VISALIA, CA 93292

TARBELL, GARY L & COLENE
37050 RD 192
WOODLAKE, CA 93286

THE MARY E MELING FAMILY LTD
PARTNERSHIP
17456 AVE 344
VISALIA, CA 93292

THORNTON, DON JR
15088 LIPSON STREET
VISALIA, CA 93292

TIMMONS, ANTHONY D
4405 E WILDWOOD CT
VISALIA, CA 93292

TORREZ, RUBEN PEREZ
300 NO ARROYO ST
VISALIA, CA 93292

TRAVIOLI FAMILY FARMS LLC
45971 DRIVE 152
OROSI, CA 93647

TRAVO, SHARON K
1500 S RIO LINDA CT
VISALIA, CA 93292

TREVINO, ISAU & LILIA
6416 AVE 400
DINUBA, CA 93618

COUNTY OF TULARE
TULARE COUNTY COURTHOUSE
VISALIA, CA 93291

TULARE IRRIGATION COMPANY
1350 W SAN JOAQUIN
TULARE, CA 93274

TURNER, DON & DEBRA A
14767 AVE 344
VISALIA, CA 93291

VALDOVINOS, SANTIAGO & VELIA
426 NO ARROYO ST
VISALIA, CA 93292

VALENCIA, ERNESTO B
P O BOX 410604
SAN FRANCISCO, CA 94141

VALER, ORITO & KRISTY
4403 E ROOSEVELT
VISALIA, CA 93292

VCPG RANCH PARTNERS LP
P O BOX 2800
VISALIA, CA 0

VINCENT, CLAYTON & DOLORES
12212 PARADISE VILLAGE; PARKWAY SOUTH
UNIT 119-C
PHOENIX, AZ 85832

VISALIA CITRUS PACKING GROUP
P O BOX 2800
VISALIA, CA 0

CITY OF VISALIA
707 W ACEQUIA
VISALIA, CA 93291

VIVEROS, NICOLAS A
207 NO ARROYO ST
VISALIA, CA 93292

WALLEN, RANDOLPH
1012 S RIO LINDA ST
VISALIA, CA 93292

WALSH, SUSAN A
926 SO RIO LINDA
VISALIA, CA 93292

WATKINS, KEITH L & SUSAN L
14852 LIPSON AVE
VISALIA, CA 93292

WEBB, JAMES W & ELAINE T
31160 TOWERS RD
VISALIA, CA 93291

WEBER, EDWARD A & SYLVIA A
28932 ROAD 148
VISALIA, CA 93292

WELCH, CRAIG A & CYNTHIA D (TRS)
4406 MC KINLEY AVE
VISALIA, CA 93292

WELLS, MATHEW S & SALLY L
4435 E GROVE CT
VISALIA, CA 93277

WERNER, SANDRA R
36996 RD 156
VISALIA, CA 93292

WHITENDALE, CARL L & BARBARA
14899 AVE 296
VISALIA, CA 93292

WHITESIDE, KENNETH & PAMELA
P O BOX 726
WOODLAKE, CA 93286

WILEY, ALFORD L & KIM
1600 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, LISA
1004 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, RALPH R JR & MARLENE
14818 E JUDY LN
VISALIA, CA 93292

WILLIS, JOYCE E
31103 TOWER RD
VISALIA, CA 93292

WILLIS, SCOTT & LORI
31141 TOWER RD
VISALIA, CA 93292

WISE, STEVE A & LINDA E
P O BOX 2564
VISALIA, CA 93279

ZIRALDO, RANDY J
31017 TOWER ROAD
VISALIA, CA 93292

ABAA VISALIA RANCH L P
15430 RD 296
VISALIA, CA 93292

ADAMS, DANIEL S & CYNTHIA A
33251 RD 148
VISALIA, CA 93291

ADNEY, BRIAN & JODY (TRS)
35599 RD 150
VISALIA, CA 93292

AKIN, BRUCE G & DENISE M
32950 RD 148
VISALIA, CA 93292

ALCAZAR, HOMERO & VERONICA
1520 SO RIO LINDA ST
VISALIA, CA 93292

ALSING, JUDY
14851 AVE 312
VISALIA, CA 93292

ALTER, ROGER C & SUSAN E
14765 AVE 296
VISALIA, CA 93292

DANA, WARREN
1840 S CENTRAL AVE
VISALIA, CA 93277

REAL PROP & ADMIN SVCS
P O BOX 410
LONG BEACH, CA 90801

AVILA, FIDENCIO P & YOLANDA M
1534 S RIO LINDA
VISALIA, CA 93292

AWBREY, JOSHUA
310 NO ARROYO ST
VISALIA, CA 93292

AYRES, MICHAEL & ALISA
4419 E WILDWOOD CT
VISALIA, CA 93292

BENBOW, WINONA A (TR EXPT TR)
8700 SO BUTTE RD
SUTTER, CA 95982

BENEDICT, RICHARD G & ILA M
31345 TOWER RD
VISALIA, CA 93292

BENITE,Z JOSE A & MARICELA
206 N ARROYO ST
VISALIA, CA 93292

BERRY, JOE F & NANCY
32077 RD 144
VISALIA, CA 93292

BJ NUT FARM LLC
15832-C MILLS DR
VISALIA, CA 93292

BLAIN FARMING CO INC
P O BOX 507
VISALIA, CA 93279

BLANKENSHIP, JACK L
31350 N TOWER RD
VISALIA, CA 93292

BOROWSKI, JANE
31231 TOWER RD
VISALIA, CA 93291

BOS, H ANTHONY
14722 AVE 328
VISALIA, CA 0

BRATSCH, PAUL J & DORIS J
31174 TOWER ROAD
VISALIA, CA 93291

BRIDGES, ROGER E & AUDREY L (TRS)
29002 RD 156
VISALIA, CA 93292

BRITTAIN, DELBERT E & MARY E (TRS)
14797 D AVE 296
VISALIA, CA 93292

BROOKSHIRE, JACK D & JOANN
31190 N TOWER RD
VISALIA, CA 93291

BROWN, DONALD L & ANGELA M
31255 TOWER RD
VISALIA, CA 93292

BURGER, HAROLD DEAN & JULIE
31031 TOWER RD
VISALIA, CA 93291

C/O BRYON FOX
14608 AVE 328
VISALIA, CA 93292

C/O CLARINDA J HART
18400 AVE 352
WOODLAKE, CA 93286

C/O CLAUDE E ATKINS
15430 AVE 296
VISALIA, CA 93292

C/O GEORGE J PERRY (TR)
6343 W MINERAL KING AVE
VISALIA, CA 93291

C/O JAN SMITH
707 W ACEQUIA
VISALIA, CA 93291

C/O LOUIS WHITENDALE
15199 AVE 292
VISALIA, CA 93292

C/O PARAMOUNT CITRUS ASSOC
1901 S LEXINGTON ST
DELANO, CA 93215

C/O PCA-NE315
1901 S LEXINGTON
DELANO, CA 93215

C/O PCA-NE315
5001 CALIFORNIA AVE #230
BAKERSFIELD, CA 93309

C/O ROLL INTERNATIONAL CORP
11444 W OLYMPIC BLVD 10TH FL
LOS ANGELES, CA 90064

C/O SANDRA T ROSALES (TR)
3361 BAGLEY AVE UNIT #15
LOS ANGELES, CA 90034

CALDERON, OSMIN
30923 TOWER RD
VISALIA, CA 93291

CALVIN INC
PO BOX 5379
FRESNO, CA 93755

CARTER, TOMMY & KIM L
1142 SO RIO LINDA ST
VISALIA, CA 93292

CASTLEWOOD PARTNERS INC
P O BOX 2622
VISALIA, CA 93292

CENTEX HOMES
1840 S CENTRAL AVE
VISALIA, CA 93277

CENTRAL VALLEY RANCH
2216 HYDE AVE
VISALIA, CA 93291

CHARTER OAK CORPORATION
411 N SUTTER COURT
VISALIA, CA 93291

CLEMENTS, HAROLD & LEONA (TRS)
891 S MC AULIFF RD
VISALIA, CA 93292

CLEMENTS, PEGGY (TR)
891 S MC AULIFF
VISALIA, CA 93292

COLEY, JAMES R
30971 TOWER RD
VISALIA, CA 93292

COLUCCI, ANTONIO F & ROSE C
33150 RD 132
VISALIA, CA 93292

CONTRERAS, FELIPE DE JESUS & HERMILL
4438 E DOUGLAS CT
VISALIA, CA 93292

COOPER, CHRISTOPHER
1416 S RIO LINDA CT
VISALIA, A 93292

COTTLE, WILLIAM L
P O BOX 1012
EXETER, CA 93221

COVE RANCHES LP
2216 HYDE AVENUE
VISALIA, CA 93291

COX, PHILLIP R
1328 S RIO LINDA CT
VISALIA, CA 93277

D & J FARMS
34441 RD 176
VISALIA, CA 93292

DANIEL, ELDON
100 WILLOW PLAZA SUITE 400
VISALIA, CA 93291

DAVIS, ALICE PATRICIA
4414 E CECIL CT
VISALIA, CA 93291

DAVIS, DAN & KATHY
4411 E CECIL CT
VISALIA, CA 93291

DAVIS,LARRY & ALICE P
4414 E CECIL CT
VISALIA, CA 93292

DE JONG, ARIE & BRENDA
37455 RD 144
VISALIA, CA 93292

DE JONGE, NEIL S & CARLA G
31142 TOWER RD
VISALIA, CA 93291

DEAN, ZACHARY D
1126 S RIO LINDA ST
VISALIA, CA 93292

DEIMLER, JAMES D & JULIA
14723 AVE 344
VISALIA, CA 93291

DENNIS, BRUCE M & SHARYN D
37319 RD 192
WOODLAKE, CA 93286

DEPT OF INTERIOR - W & P R S
2800 COTTAGE WAY
SACRAMENTO, CA 95825

DIR, DALE B & BILLIE
P.O. BOX 10447
BAINBRIDGE ISLAND, WA 98110

DOUGLASS, RONALD W & BEVERLY J
(TRS)
30955 TOWER RD
VISALIA, CA 93292

DOWLING, H WILLIAM & VIRGINIA O
35599 1/2 ROAD 150
VISALIA, CA 93291

DREO, JAMES & WYONELL J
32951 RD 148
VISALIA, CA 93292

DUGGER, JAMES T & MARCIA L
14797 A AVE 296
VISALIA, CA 93292

DURHAM, CECIL & CHRISTINE
1706 S MICHAEL CT
VISALIA, CA 93292

DUVALL, DORIS
4428 E CECIL CT
VISALIA, CA 93292

ECKER, AARON & GINA
4330 E COLLEGE AVE
VISALIA, CA 93292

ECKES, GREGORY J & JEANNE
4423 E SYCAMORE CT
VISALIA, CA 93282

EGGLESTON, WILLIAM A & BOBBIE S
35599 ROAD 150 APT A
VISALIA, CA 93291

ENNIS LAND DEVELOPMENT LLC
643 N WESTWOOD ST
PORTERVILLE, CA 93257

EREDIA, JOSE B & CATHERINE M
14852 AVE 312
VISALIA, CA 93291

ERMIE, PAUL & ANDREA
31365 TOWER RD
VISALIA, CA 93292

ERNE, CHARLES A & HELEN A
14844 LIPSON AVE
VISALIA, CA 93292

ESTABROOKS, BRIAN & SHERRY
14870 AVE 360
VISALIA, CA 93291

EVANS, JUDITH L (SCSR TR)
248 E EVERGREEN
VISALIA, CA 93277

FIFE, RUBY E (TR)
34922 RD 152
VISALIA, CA 0

FLORES, JOE E
5788 LAWRENCE AVE
DINUBA, CA 93618

FORD, GLORIA
4432 E ROOSEVELT CT
VISALIA, CA 0

FOX, BYRON & KELLY
14608 AVE 328
VISALIA, CA 93291

FRY, STEVE A & SHAUNA
28868 RD 148
VISALIA, CA 93292

FULTON, WESLEY MONROE & FLORENCE
ELV
4410 E DOUGLAS AVE
VISALIA, CA 93292

FUMIA, JOHN C & CATHERINE R (TRS)
1736 LAURELWOOD DR
San Jose, CA 95125

GARCIA, ALEXANDER & TERESA
14890 AVE 296
VISALIA, CA 93292

GARCIA, VAL
4433 E ROOSEVELT CT
VISALIA, CA 93292

GARRIDO, FRANCISCO P & INEZ P
836 S RIO LINDA ST
VISALIA, CA 93292

GATEWOOD, HENRY L
4420 E GROVE CT
VISALIA, CA 93292

GOMES, RICHARD J & BETTY L (TRS)
31121 TOWER RD
VISALIA, CA 93291

GONZALES, FERNANDO & MARYHELEN
1530 S RIO LINDA ST
VISALIA, CA 93292

GOOCH, DELILA R
14850 AVE 313
VISALIA, CA 93292

GORDEN, JAMES M & MARY A
P O BOX 44066
LEMON COVE, CA 93244

GRAVES, KURT & VICTORIA L
914 SO RIO LINDA ST
VISALIA, CA 93292

GRAY, CRECENCIA (SURV TR)
30907 TOWER RD
VISALIA, CA 93292

GREEN, IRA
15440 W LONGBOW DR
SHERMAN OAKS, CA 0

GUILLEN, RAYMOND T & SANDRA
4433 E SYCAMORE CT
VISALIA, CA 93292

GUTIERREZ, CHRISTOPHER J & NICOLE D
1608 E MONTE VISTA CT
VISALIA, CA 93277

GUTIERREZ, JORGE
500 NO ARROYO ST
VISALIA, CA 93292

GUTIERREZ, MANUEL OLIVA
31175 TOWER RD
VISALIA, CA 93292

GUTIERREZ, OMAR & MARIA
1444 TAMPICO AVE
SALINAS, CA 93906

HACOBIAN, DARWIN
19839 AVENUE 364
WOODLAKE, CA 93286

HAGGARD, GERALD C & KIM B
31081 TOWER RD
VISALIA, CA 93291

HAMILTON, STEVEN D
610 N COMSTOCK CT
VISALIA, CA 93292

HANCOCK, JON & KIMBERLEY
325 NO ARROYO ST
VISALIA, CA 93291

HANSON, MATTHEW A & GRACE
4416 E ROOSEVELT CT
VISALIA, CA 93292

HARPER, STEVE L & ANNE
4432 E RACE AVE
VISALIA, CA 93292

HARRELL, WENDELL H & WILMA J
31217 TOWER RD
VISALIA, CA 93291

HART, NORMAN & BARBARA (TRS)
14167 AVE 320
VISALIA, CA 93292

HART, ROBERT EARL
33857 ROAD 160
VISALIA, CA 93292

HASH, EULA MAE
15093 AVE 280
VISALIA, CA 93292

HAURY, JAMES O & PATRICIA M (TRS)
5704 W SWEET DR
VISALIA, CA 93291

HENGST, ROBERT H & LINDA L (TRS)
37900 MILLWOOD AVE
WOODLAKE, CA 93286

HENRY, ROBERT & SHELLY
324 NO ARROYO ST
VISALIA, CA 93292

HERNANDEZ, BERTHA E
846 S RIO LINDA
VISALIA, CA 93292

HERNANDEZ, OFELIA
P O BOX 107
WOODLAKE, CA 93286

HIGBEE, RICHARD E & DOROTHY J
4422 E MC KINLEY AVE
VISALIA, CA 93292

HILL, JAMES K
4425 E GROVE CT
VISALIA, CA 93292

HILVERS, NICKOLAS J JR & TRICIA
28852 RD 1480
VISALIA, CA 93292

HORNUNG, CRAIG S
3324 S JACKIE ST
VISALIA, CA 93277

HOUSMAN, JEFF & MARILYN
14935 AVE 312
VISALIA, CA 93292

HUGHES, THOMAS B & BEVERLEY G (TRS)
31357 TOWER RD
VISALIA, CA 93291

HUNSAKER, EDWARD B & JANET M
4344 E MEADOW LANE
VISALIA, CA 93292

HUSSMAN, RICHARD L
4434 E SYCAMORE CT
VISALIA, CA 93292

HUTCHERSON, JERRY & DEBRA L
31183 TOWER RD
VISALIA, CA 93291

HUTSON, JUDY ANNE
1108 S RIO LINDA
VISALIA, CA 93292

IBARRA, JORGE
1619 SOUTH 79TH LANE
PHOENIX, AZ 85043

INGRAM, WILLIAM G & JOYCE J (TRS)
3913 COUNTRY CLUB DR
LAKEWOOD, CA 90712

IRACHETA, VICENTE & GRACIA
438 NO ARROYO ST
VISALIA, CA 93292

JEFFERS, SUSAN L
804 POMEROY RD
NIPOMO, CA 93444

JENKINS, DUSTIN & KRISTINA M
4310 E LAUREL
VISALIA, CA 93291

JERNAGAN, WAYNE & SHERRIE
4402 E ROOSEVELT CT
VISALIA, CA 93292

JIMENEZ, LOUIS & LIZA M
4437 E MCKINLEY AVE
VISALIA, CA 93292

JIMENEZ, SIMON & MARIBEL
1526 S RIO LINDA ST
VISALIA, CA 93292

JOHN & ELEANOR BENETTI CO-TRS
1509 SAN ARDO DR
San Jose, CA 95125

JOHNSON, ALAN L & TRUDY C (TRS)
19109 AVE 300
EXETER, CA 93221

JOHNSON, C PAUL & SHIRLEY E (TRS)
31618 RD 148
VISALIA, CA 93291

KHAMNEUNGTHAL, VIENGXAY
414 N ARROYO ST
VISALIA, CA 93292

KING, GERALD D & LINDA A
31273 TOWER RD
VISALIA, CA 93292

KONG, DENNY M
210 NO ARROYO ST
VISALIA, CA 93292

KOSTER, DOUGLAS E & MARSHA J
3124 STEVENSON DR
PEBBLE BEACH, CA 93953

KUECHEL, ANNETTE MARIE
37297 RD 192
WOODLAKE, CA 93286

LAMBERT, CHRIS & ERIN E
920 SO RIO LINDA ST
VISALIA, CA 93292

LANDERS, LOREEN
28908 RD 148
VISALIA, CA 93292

LANGDON, RICHARD E JR
31173 TOWER RD
VISALIA, CA 93292

LARSEN, RICHARD M & MARY ANN (TRS)
P O BOX 22127
SAN DIEGO, CA 92192

LEE, BRENDA J
1544 S RIO LINDA ST
VISALIA, CA 93292

LEE, CHER
301 NO ARROYO ST
VISALIA, CA 93292

LEE, SARN
4405 E MCKINLEY
VISALIA, CA 93292

LEWIS, JOHN W & CHRYSTAL R
31203 TOWER RD
VISALIA, CA 93292

LOCKE, ROBERT E & KARON R
31001 TOWER RD
VISALIA, CA 93291

LOPEZ, ROSENDO N & MARTHA M
30939 TOWER RD
VISALIA, CA 93292

LORENTZEN, PAUL C (TR)
2627 E PRINCETON
VISALIA, CA 93292

LOZA, FILIBERTO & ERNESTINA D
1510 S RIO LINDA ST
VISALIA, CA 93292

LUCAS, EARL E (TR)
31181 TOWER RD
VISALIA, CA 93291

LUNA, CHRISTOVAN E
4430 E OAK AVE
VISALIA, CA 93292

LY, TAM
221 NO ARROYO ST
VISALIA, CA 93292

LYNCH, MICHAEL J & PATRICIA J
4422 E DOUGLAS AVE
VISALIA, CA 93292

MANES, WALTER S & DOROTHY E
30985 TOWER RD
VISALIA, CA 93291

MARSH, RICHARD & MICHELE
4338 E COLLEGE AVE
VISALIA, CA 93292

MARTINEZ, GLORIA
31280 TOWER RD
VISALIA, CA 93292

MARTINEZ, TINA M & RAY S
1030 SO RIO LINDA ST
VISALIA, CA 93292

MC BRIDE, NANCY
826 S RIO LINDA ST
VISALIA, CA 93292

MC NALLY, INVESTMENTS A CA CORP
1805 W MAIN
VISALIA, CA 93291

MEDINA, JOSE LUIS & JUANA
1430 S RIO LINDA CT
VISALIA, CA 93292

MEDLOCK, RONNIE G & ANTONETTE
14725 AVE 296
VISALIA, CA 93292

MILLER, TIM & JERUSHA
2944 E PERSHING CT
VISALIA, CA 93292

MIRTORABI, MASOUD
20058 VENTURA BLVD #124
WOODLAND HILLS, CA 91364

MORAN, FRANCISCO
3 INGRAHAM CT
WATSONVILLE, CA 95076

NEWBERRY, ELROY R & LUPE A
36667 RD 148
VISALIA, CA 93292

NEWBERRY, RUBY I (TR)
36777 RD 148
VISALIA, CA 93292

NGUYEN, THO VAN
2424 OLD CREST PLACE
San Jose, CA 0

NIBLETT, STEPHEN R & TERESA K
4626 W WALNUT AVE
VISALIA, CA 93277

NIETO, OMAR GARCIA
100 NO ARROYO ST
VISALIA, CA 93292

NORTHAM, PATRICIA B (TR)
31161 TOWER RD
VISALIA, CA 93291

NUNES, TONY A & MARY A
4436 E MC KINLEY AVE
VISALIA, CA 93292

OAKES DITCH COMPANY
P O BOX 366
FARMERSVILLE, CA 93223

OLMOS, DOMINGO & ALICE (TRS)
1020 RIO LINDA ST
VISALIA, CA 93292

PADRON, GILBERT & ELVIA
4413 E GROVE CT
VISALIA, CA 93292

PAREGIEN, CHARLES C JR & BARBARA R (
14637 AVE 336
VISALIA, CA 93292

PAREGIEN, STEVEN D & KERI L
15080 AVE 336
VISALIA, CA 93292

PARKS, RICHARD A & JEANETTE A
31329 TOWER RD
VISALIA, CA 93291

PELTZER, BARBARA A (TR)
34286 RD 188
WOODLAKE, CA 93286

PELTZER ENTERPRISES GEN PNP
17396 AVE 344
VISALIA, CA 93292

PELTZER GROVES INC
34286 RD 188
WOODLAKE, CA 93286

PEREZ, OCTAVIO & LUCY
P O BOX 2589
WATSONVILLE, CA 95077

POLICH, THOMAS H & THERESA J (TRS)
31045 TOWER RD
VISALIA, CA 93291

POTTS, MICHAEL R
36680 MILLWOOD DR
WOODLAKE, CA 93286

PULLIN, JASON & KARRY
1136 SO RIO LINDA ST
VISALIA, CA 93292

PUTNAM, TIMOTHY & TORY D
4418 E WILDWOOD CT
VISALIA, CA 93292

RABB BROS RANCH INC
P O BOX 736
SAN JOAQUIN, CA 93660

RABB FARMS LLC
P O BOX 736
SAN JOAQUIN, CA 93660

RAMIREZ, HUGO & LYNETTE M (CO-TRS)
28687 RD 148
VISALIA, CA 93292

RAMIREZ, NICOLAS & SAN JUANA
31315 TOWER RD
VISALIA, CA 93292

REYNOSO, BENJAMIN & LORENE
36612 ROAD 148
VISALIA, CA 93291

REYNOSO, FRANK
6038 N SPALDING
FRESNO, CA 93710

REYNOSO, JOSEPH D & CONCEPCION G
36646 ROAD 148
VISALIA, CA 93291

RICO, EDDIE
123 NO ARROYO ST
VISALIA, CA 93292

RITCHIE, DOYLE & WANDA
P O BOX 3191
VISALIA, CA 93278

ROBLES, JAIME & OLGA I
4421 E DOUGLAS AVE
VISALIA, CA 93292

RODRIGUEZ, BELIA
1440 SO RIO LINDA CT
VISALIA, CA 93291

RODRIGUEZ, JAVIER JR & RHONDA
4440 E CECIL CT
VISALIA, CA 93292

RODRIGUEZ, MIGUEL A & CHRISTIE L
313 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, REFUGIO & IMELDA
111 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, SAUL & CHRISTINA
4439 E CECIL CT
VISALIA, CA 93292

ROSALES, JENNIFER A & JORGE A
1540 S RIO LINDA ST
VISALIA, CA 93292

ROSE, HUDSON S & ELIZABETH J
P O BOX 36
YETTEM, CA 93670

RUVALCABA, ANNETTE
4427 E RACE AVE
VISALIA, CA 93292

SABAN, GENALYN
110 NO ARROYO ST
VISALIA, CA 93292

SALDANA, MARCELLO
2505 E GOSHEN AVE
VISALIA, CA 93292

SANCHEZ, AARON
1840 SO JULIE ANN
VISALIA, CA 93277

SANCHEZ, GUILLERMO & BERTHA (TRS)
4435 E WILDWOOD CT
VISALIA, CA 93292

SANCHEZ, JIM & DARLENE
402 NO ARROYO
VISALIA, CA 93292

SANGHA, SUKHDEV S & SEWA K
1604 S RIO LINDA ST
VISALIA, CA 93292

SANTELLAN, RUBEN D & ANITA M
4404 E WILDWOOD CT
VISALIA, CA 93291

SCHNEIDER, GERALD M & NANCY L
33651 RD 148
VISALIA, CA 93291

SCHNEIDER, PATRICIA R (TR)
846 N CHINOWTH
VISALIA, CA 93291

SCOTT, DANIEL J
1100 S RIO LINDA
VISALIA, CA 93292

SELIG, MARK
222 NO ARROYO ST
VISALIA, CA 93292

SHAWL, ROBERT M
33753 RD 188
WOODLAKE, CA 93286

SHIMAJI T, TOM & JUNE
14851 AVE 360
VISALIA, CA 93292

SHOCKENCY, GLENN & VALERIE
510 NO ARROYO ST
VISALIA, CA 93292

SILVEIRA, JOE N & MARIA F (TRS)
4417 E ROOSEVELT CT
VISALIA, CA 93292

SLOVER, FRED G & BONNIE (TRS)
15302 AVE 288
VISALIA, CA 93292

SLOVER, RAY S (TR)
14840 AVE 288
VISALIA, CA 93292

SOTO, JESUS R
4411 E DOUGLAS ST
VISALIA, CA 93292

SOUTHERN CALIFORNIA EDISON COMPANY
P O BOX 800
ROSEMEAD, CA 91770

STANIC, MUROSLAV M & KATARINA
5601 W HILLSDALE
VISALIA, CA 93291

STONE CORRAL IRR DIST
37656 RD 172
VISALIA, CA 93291

STROBEN, THOMAS S & LORETTA (TR)
31191 TOWER RD
VISALIA, CA 93291

SUAREZ, IRENE
4429 E OAK AVE
VISALIA, CA 93292

TARBELL, GARY L & COLENE
37050 RD 192
WOODLAKE, CA 93286

THE MARY E MELING FAMILY LTD
PARTNERSHIP
17456 AVE 344
VISALIA, CA 93292

THORNTON, DON JR
15088 LIPSON STREET
VISALIA, CA 93292

TIMMONS, ANTHONY D
4405 E WILDWOOD CT
VISALIA, CA 93292

TORREZ, RUBEN PEREZ
300 NO ARROYO ST
VISALIA, CA 93292

TRAVIOLI FAMILY FARMS LLC
45971 DRIVE 152
OROSI, CA 93647

TRAVO, SHARON K
1500 S RIO LINDA CT
VISALIA, CA 93292

TREVINO, ISAU & LILIA
6416 AVE 400
DINUBA, CA 93618

COUNTY OF TULARE
TULARE COUNTY COURTHOUSE
VISALIA, CA 93291

TULARE IRRIGATION COMPANY
1350 W SAN JOAQUIN
TULARE, CA 93274

TURNER, DON & DEBRA A
14767 AVE 344
VISALIA, CA 93291

VALDOVINOS, SANTIAGO & VELIA
426 NO ARROYO ST
VISALIA, CA 93292

VALENCIA, ERNESTO B
P O BOX 410604
SAN FRANCISCO, CA 94141

VALER, ORITO & KRISTY
4403 E ROOSEVELT
VISALIA, CA 93292

VCPG RANCH PARTNERS LP
P O BOX 2800
VISALIA, CA 0

VINCENT, CLAYTON & DOLORES
12212 PARADISE VILLAGE; PARKWAY SOUTH
UNIT 119-C
PHOENIX, AZ 85832

VISALIA CITRUS PACKING GROUP
P O BOX 2800
VISALIA, CA 0

CITY OF VISALIA
707 W ACEQUIA
VISALIA, CA 93291

VIVEROS, NICOLAS A
207 NO ARROYO ST
VISALIA, CA 93292

WALLEN, RANDOLPH
1012 S RIO LINDA ST
VISALIA, CA 93292

WALSH, SUSAN A
926 SO RIO LINDA
VISALIA, CA 93292

WATKINS, KEITH L & SUSAN L
14852 LIPSON AVE
VISALIA, CA 93292

WEBB, JAMES W & ELAINE T
31160 TOWERS RD
VISALIA, CA 93291

WEBER, EDWARD A & SYLVIA A
28932 ROAD 148
VISALIA, CA 93292

WELCH, CRAIG A & CYNTHIA D (TRS)
4406 MC KINLEY AVE
VISALIA, CA 93292

WELLS, MATHEW S & SALLY L
4435 E GROVE CT
VISALIA, CA 93277

WERNER, SANDRA R
36996 RD 156
VISALIA, CA 93292

WHITENDALE, CARL L & BARBARA
14899 AVE 296
VISALIA, CA 93292

WHITESIDE, KENNETH & PAMELA
P O BOX 726
WOODLAKE, CA 93286

WILEY, ALFORD L & KIM
1600 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, LISA
1004 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, RALPH R JR & MARLENE
14818 E JUDY LN
VISALIA, CA 93292

WILLIS, JOYCE E
31103 TOWER RD
VISALIA, CA 93292

WILLIS, SCOTT & LORI
31141 TOWER RD
VISALIA, CA 93292

WISE, STEVE A & LINDA E
P O BOX 2564
VISALIA, CA 93279

ZIRALDO, RANDY J
31017 TOWER ROAD
VISALIA, CA 93292

(END OF ATTACHMENT 2)

[D1007049/A0805039 Yacknin](#)



[CPUC Home](#)

9. Infeasibility of Environmentally Superior Alternative

9.1. Route Selection

9.1.1. SCE

SCE argues that all of the alternatives except Alternative 1 are infeasible in terms of being able to meet the project objectives in the necessary timely fashion. SCE asserts that there is an urgent need to address current reliability issues in the electrical service area. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 megawatts (MW), and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single-contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need for rolling outages and/or customer blackouts in the area served by Rector Substation.

SCE asserts that all of the alternatives except Alternative 1 risk significant delay. First, all of the alternatives except Alternative 1 cross critical biological habitat, requiring environmental surveys that, according to SCE, could take two years to conduct. Furthermore, if the surveys determine listed species are present, SCE states that permitting could take an additional one to two years if a federal nexus establishes U.S. Army Corps of Engineers jurisdiction, or an additional five to 10 years if there is no federal nexus. Second, based on SCE's proposed labor resources and work schedule for the initial demolition and construction associated with the replacement of existing transmission infrastructure north of Rector Substation, Alternative 1 would involve approximately three months of outages as compared to 10, 13 and 8 months, respectively, for Alternatives 2, 3 and 6. In turn, these longer construction durations create a greater risk of further delay as the result of mitigation requiring SCE to avoid interfering with raptor nesting and optimum crop growing seasons. SCE testified that, while it might be possible to shorten the duration of construction activities by increasing the labor crews and extending the work schedule, this increase in construction activity may impact SCE's ability to successfully implement some of the necessary mitigation measures.

On the other hand, peak demand load has dropped since 2007, and the California Energy Commission's most recent adopted forecast of California energy demand projects SCE's per capita peak demand to remain relatively flat through the 2018 horizon without returning to the 2007 levels.¹³ While the risk that construction will be delayed to the extent SCE speculates is possible, it is also possible that any incremental delay will be much more modest. For example, as SCE notes, it is possible to accelerate construction by increasing labor crews and work

schedules. Furthermore, it is possible and, according to SCE, even likely that permitting for Alternative 2 will be subject to the jurisdiction of the U.S. Army Corps of Engineers,¹⁴ which would not implicate the five to 10 year delay that SCE suggests might otherwise be required.

While "sooner" is certainly "better" with respect to addressing our current reliability concerns, we are keenly aware that, for practical purposes, a transmission line "is forever." On balance, we find that the need to address current reliability concerns does not render any of the alternatives infeasible.¹⁵

9.1.2. Farm Bureau

Farm Bureau asserts that the strong value that the community places on its high value orchard crops is cause to select the route alternative that minimizes impacts to those crops. To the extent that Farm Bureau means to suggest that the Commission should consider Alternative 2's economic impacts to the agricultural community, Farm Bureau does not assert, and we do not find, that the project's economic impact to orchard growers renders Alternative 2 infeasible. To the extent that Farm Bureau means to suggest that the community's relative support of an alternative is cause to select it, we do not view Pub. Util. Code § 1002(a)(1) as authorizing the selection of a project alternative on the basis of popularity. To the contrary, the issue is whether the project's impact will damage the community's character and identity. (See, e.g., *Lodi Gas Storage*, D.00-05-048 at 31-32, considering whether the presence of a natural gas storage facility would damage the community's winegrape growing reputation.) In this case, Farm Bureau does not assert, and we do not find, that Alternative 2 will damage community's character and identity as an agricultural community.

9.1.3. Farmersville

Farmersville objects to Alternative 1 because of its potential adverse impact on property values; its displacement of land designated for urban development that, in turn, would potentially be replaced with agricultural land; and its interference with the recreational opportunity afforded by a park and pond located along the transmission line route. Because we select Alternative 2, we do not reach this issue.

9.2. Additional Mitigation

Visalia and Farm Bureau invoke Pub. Util. Code § 1002(a)(1) as a basis to condition project certification on additional mitigation measures, regardless of the selected project alternative. Visalia recommends that, in consideration of the community's concerns regarding the proposed project's impact on Visalia's open-space values, recreation and aesthetics, the Commission should require SCE to develop and dedicate to the City a landscaped open space pathway under the transmission line; form a conjunctive use committee to identify landscaping and other measures for SCE to implement; and develop, in consultation with a designated visual specialist and Visalia, a visual relief plan that would specify appropriate structure surface treatments and vegetative screening. Similarly, Farm Bureau requests that, in consideration of the agricultural community's concerns, the Commission require the establishment of an agricultural advisory committee to provide input into the details of implementing the agricultural mitigation measures identified in the EIR.

We deny these requests. Visalia and Farm Bureau do not demonstrate and we do not find that Alternative 2, or any of the alternatives, damages the community's agricultural, recreational or aesthetic character. To the extent that it would be located in Visalia, the proposed project would lie within an existing transmission right of way, and the EIR appropriately determines that, with mitigation, the project's impacts to recreational and aesthetic resources are less than significant. While Alternative 2 will convert 25.6 acres of farmland to non-agricultural use, this cannot reasonably be found to thereby damage Tulare County's agricultural character.

Farm Bureau asserts that the mitigation monitoring, reporting and compliance program requires greater transparency, and recommends that it be revised to provide that all landowners impacted by the project will be provided a copy of the dispute resolution procedures, compliance requirements, and SCE's plans and documentation submitted to the Commission. While Farm Bureau's further recommendation is unduly burdensome, it is reasonable to provide the impacted landowners with a copy of the mitigation monitoring, reporting and compliance plan. We direct Energy Division to serve the mitigation monitoring, reporting and compliance program on all landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

¹³ We grant PACE's request for official notice of the *California Energy Demand 2010-2020 Adopted Forecast*, California Energy Commission, CEC-200-2009-012 (December 2, 2009).

¹⁴ "Although uncertain at this time, impacts to vernal pool habitats or jurisdictional drainages resulting from construction of Alternative 2 would likely [be subject to the jurisdiction of the U.S. Army Corps of Engineers]." (Application 08-05-039, Proponent's Environmental Assessment, Section 4.4 at 4-118.)

¹⁵ SCE suggests that Alternative 1's significantly lower cost as compared to Alternative 2 is an important consideration to the identification of the environmentally superior alternative. To the contrary, economic impacts of a proposed project are not by themselves environmental impacts (CEQA Guideline § 15131) and therefore not relevant to the determination of the environmentally superior alternative. The appropriate context for consideration of this cost difference is with respect to project feasibility. (CEQA Guideline § 15091(a)(3).) However, SCE does not assert, and we do not find, that Alternative 2 is economically infeasible.

[Previous Page](#) [Top of Page](#) [Next Page](#) [First Page](#)

Volume 1: Chapters 1 through 9

**SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP
220 KV TRANSMISSION LINE PROJECT**

CPUC A.08-05-039

SCH #: 2008081090

Final Environmental Impact Report
(Response to Comments)

Prepared for:
California Public Utilities Commission

February 2010



Volume 1: Chapters 1 through 9

**SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP
220 KV TRANSMISSION LINE PROJECT
CPUC A.08-05-039
SCH #: 2008081090**

Final Environmental Impact Report
(Response to Comments)

Prepared for:
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

February 2010

225 Bush Street
Suite 1700
San Francisco, CA 94104
415.896.0000
www.esassoc.com

Los Angeles

Oakland

Olympia

Petaluma

Portland

Sacramento

San Diego

Seattle

Tampa

Woodland Hills

207584.01



TABLE OF CONTENTS

SCE's San Joaquin Cross Valley Loop Transmission Project, (A.08-05-039) Final Environmental Impact Report (Response to Comments)

	<u>Page</u>
Volume 1	
1. Introduction	1-1
1.1 Purpose	1-1
1.2 Organization of the Final EIR	1-1
2. Introduction to Comments and Responses	2-1
2.1 Opportunities for Public Comment on the Draft EIR	2-1
2.2 Comments on the Draft EIR	2-2
2.3 Responses to Comments	2-3
2.4 List of Commenters and Comment Letters on Draft EIR	2-4
3. Comment Letters and Public Meeting Transcript	3-1
3.1 Letters from Organizations	3.1-1
3.2 Letters from Individuals	3.2-1
3.3 Transcript from Public Meeting	3.3-1
4. Master Responses	
4.1 Agricultural Issues	4.1-1
4.2 Cultural Resources	4.2-1
4.3 Electric and Magnetic Fields	4.3-1
4.4 Groundwater	4.4-1
4.5 Wells	4.5-1
4.6 Alternatives	4.6-1
4.7 Non-CEQA Issues	4.7-1
5. Responses to Organizations	5-1
6. Responses to Individual Comments	6-1
7. Responses to Public Meeting Comments	7-1
8. Revisions to the Draft EIR	8-1
8.1 Introduction	8-1
8.2 Text Changes	8-1

	<u>Page</u>
9. Agencies, Organizations, and Persons that Received the Final EIR	9-1
Final EIR Figures	
4.6(RTC)-1 Alternative 3A Conceptual Alignment	4.6-9
4.6(RTC)-2 Seville Subdivision Lines and Hamlet Development Boundary	4.6-13
5(RTC)-1 Existing view of SCE ROW from Avenue 320 and Road 144 looking west	5-42
Revised Draft EIR Figures	
4.9-4 City Farmersville General Plan Land Uses	6-8 and 8-23
Final EIR Tables	
2(RTC)-1 Organizations and Agencies that Submitted Comments on the Draft EIR	2-5
2(RTC)-2 Individuals who Submitted Comments on the Draft EIR	2-7
2(RTC)-3 Index of Public Hearing Transcript, Visalia Convention Center, Visalia, CA - July 23, 2009	2-10
4.6(RTC)-1 Permanent Disturbance of Farmland	4.6-11
5(RTC)-1 Structure Height Increases to Allow for Continued Walnut Orchard Production In New Row for the Proposed Project	5-41
9(RTC)-1 Organizations, Agencies and Individuals Sent a Hard Copy of the Final EIR via Overnight Delivery Service	9-2
9(RTC)-2 Organizations, Agencies and Individuals Sent a Hard Copy of the Final EIR via USPS	9-3
9(RTC)-3 Organizations, Agencies and Individuals Sent a Compact Disc (CD) Copy of the Final EIR via USPS	9-4
Revised Draft EIR Tables	
4.2-6 Mitigation Measure 4.2-4: Required Pole Heights for Structures in New Row Containing Walnut Orchards	5-44
2-8 Proposed Construction Timetable	5-51 and 8-5
ES-2 Summary of Significant Unmitigable (Class I) Environmental Impacts of the Proposed Project and Alternatives	5-62 and 8-2

Page**Volume 2 (bound separately)****Appendices**

A. Notice of Availability	A-1
B. Draft EIR Newspaper Legal Advertisements	B-1
C. CPUC Project website	C-1
D. Public Meeting Sign-in Sheets	D-1
E. Public Meeting Presentation	E-1
F. Comment Letters Received After the Scoping Period and Prior to Draft EIR Publication	F-1
G. Revisions to Draft EIR Section 4.2, Agricultural Resources	G-1
H. Mitigation Monitoring, Reporting, and Compliance Program	H-1
I. Parcel Land Use Analysis	I-1
J. Certificate of Service	J-1

CHAPTER 1

Introduction

1.1 Purpose

This Response to Comments document is the finalizing addendum to the Draft Environmental Impact Report (Draft EIR) prepared by the California Public Utilities Commission (CPUC) for consideration of Southern California Edison's (SCE's) application to construct the San Joaquin Cross Valley Loop Transmission Project (Proposed Project).

The Draft EIR detailed the Proposed Project, evaluated and described the potential environmental impacts associated with the construction, operation and maintenance of SCE's Proposed Project, identified those impacts that could be significant, and presented mitigation measures, which, if adopted by the CPUC or other responsible agencies, could avoid or minimize these impacts. The Draft EIR also evaluated alternatives to the Proposed Project, including the No Project Alternative, as required by the California Environmental Quality Act (CEQA).

The Proposed Project would include the replacement of approximately 1.1 miles of two sets of single circuit 220 kV transmission line with a single double circuit transmission line, and the construction of an approximately 18.5 mile-long double circuit transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation, in northwestern Tulare County. The Proposed Project would also include installation of electrical equipment, substation supporting structures and a mechanical and electrical equipment room at the Rector Substation, as well as electrical system upgrades to Rector, Springville and Vestal Substations in Tulare County, and Big Creek 3 Substation in Fresno County.

This Response to Comments document, together with the June 2009 Draft EIR, constitutes the Final EIR for the Proposed Project. The CPUC, as the Lead Agency for this process, is required by CEQA Guidelines Section 15089 to prepare a Final EIR. The Final EIR will be used by the CPUC as part of its application approval process, which includes selecting project alternatives, adopting mitigation measures, and reviewing project costs.

1.2 Organization of Final EIR

As required by CEQA Guidelines Section 15132, the Final EIR consists of the following elements:

- (a) The Draft EIR or a revision of the draft;
- (b) Comments received on the Draft EIR either verbatim or in summary;

- (c) A list of persons, organizations, and public agencies that commented on the Draft EIR;
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and
- (e) Any other information added by the lead agency.

The Final EIR for the Proposed Project contains information in response to concerns that were raised during the public comment period (June 16, 2009 through July 31, 2009).

This Response to Comments document is separated into two volumes.

Volume 1 consists of nine chapters.

- **Chapter 1** is an introductory chapter that describes the purpose as well as the organization of the Final EIR.
- **Chapter 2** describes the organization of the comment letters, and the coding system used to identify individual comments. It also describes the organization of the responses to the comments received on the Draft EIR, and includes a list of all agencies, organizations, and individuals that submitted comments.
- **Chapter 3** contains copies of all comment letters received on the Draft EIR as well as a copy of the transcript for the public meeting held on July 23, 2009, after publication of the Draft EIR. Each individual comment is identified by alphanumeric code within the comment letter or transcript.
- **Chapter 4** contains master responses, which provide comprehensive discussions to respond to select sets of issues that received multiple comments. Each master response includes cross-references to the individual comments being addressed, using the alphanumeric codes shown in Chapter 3.
- **Chapters 5, 6 and 7** present the individual responses directed specifically to each comment for organizations, individuals, and oral comments received at the public meeting, respectively. These chapters also contain text changes to the Draft EIR that resulted from changes made in response to comments. In some cases, the reader is referred to a master response in Chapter 4, or to another individual response that addresses the same issue.
- **Chapter 8** contains all text changes to the Draft EIR which include both (1) changes to correct errors or to clarify information presented in the Draft EIR, and (2) text changes as a result of responding to comments, as presented in Chapters 4 through 7.
- **Chapter 9** lists all agencies, organizations, and persons that are receiving the Final EIR. This includes all organizations and individuals who submitted comments on the Draft EIR.

Volume 2: Appendices, provides supporting documentation for information presented in the Response to Comments Document. A digital copy of the Draft EIR, published June 2009, and this Response to Comments document is included on a compact disc (CD) at the end of this document.

CHAPTER 2

Introduction to Comments and Responses

2.1 Opportunities for Public Comment on the Draft EIR

Notification

On Tuesday, June 16, 2009, the CPUC published and distributed the Notice of Availability (NOA) of a Draft EIR to advise interested local, regional, and state agencies, and the interested public, that a Draft EIR had been prepared and published for the Proposed Project. The NOA solicited both written and verbal comments on the Draft EIR during a 45-day comment period (June 16, 2009 through July 31, 2009), and provided information on a forthcoming public comment meeting. Additionally, the NOA presented the background, purpose, description, and location of the Proposed Project, as well as the contact name for additional information regarding the project.

In addition to the NOA, the CPUC notified the public about the public comment meeting through multiple newspaper legal advertisements and the project website. The NOA, newspaper legal advertisements, and the project website are presented in Appendices A, B, and C, respectively. Notifications provided basic project information, the date, time, and location of the public comment meeting, and a brief explanation of the public meeting process.

The CPUC published legal advertisements in English and Spanish in The Fresno Bee on June 16 and July 18, 2009; in English and in Spanish in The Foothills Sun-Gazette on June 17 and July 22, 2009; and in English and Spanish in the Visalia Times-Delta on June 16 and July 18. Additionally, an electronic copy of the NOA and the Draft EIR were posted on the CPUC's website at: http://www.cpuc.ca.gov/Environment/info/esa/sjxvl/deir_toc.html.

The public was encouraged to submit written comments and concerns regarding the Proposed Project and the adequacy of the Draft EIR by mail, facsimile, or email to the CPUC.

Public Comment Meeting

The CPUC conducted a public comment meeting on Thursday, July 23, 2009, from 6:30 to 9:30 pm at the Visalia Convention Center, at 303 East Acequia Avenue, Visalia, California. Approximately 500 members of the public attended the public comment meeting, as well as five agency representatives: Jensen Uchida of the CPUC, and Doug Cover, Jennifer Johnson, Claire Myers and Larry Kass of ESA. Sign-in sheets from the public comment meeting are provided in Appendix D. Meeting attendees were encouraged to sign in and materials including presentation slides, a comment card, copies of the NOA, and a speaker card were made available.

A presentation (Appendix E) was given which included an overview of the environmental review process, the regional context, project background, project objectives, project description, project alternative, and role of the public comments. Following the presentation, public comments were taken and documented by a court reporter (see Chapter 3, Section 3.3). All attendees were encouraged to submit written comments (see Chapter 3, Sections 3.1 and 3.2).

2.2 Comments on the Draft EIR

Written Comments

One-hundred twenty-nine (129) comment letters were received during and after the Draft EIR public review period, including 31 from organizations, the applicant, and public agencies (organizations), and 98 from members of the public (individuals). The comment letters received on the Draft EIR are listed below in Section 2.4, organized by organizations and individuals, and further organized by order of arrival. Each comment letter has been assigned a corresponding alphabet letter designation, as well as a unique comment number designating order of receipt. Letters from organizations are designated with a capital ‘O’, and individuals with a capital ‘I’. For example, the first letter received from an organization was from the San Joaquin Valley Air Pollution Control District, and is identified as letter O1. Individual comments within letters are marked sequentially with numbers, such as O1-1, O1-2, etc. Copies of all letters received are provided in Chapter 3.

Public Meeting Comments

As noted above, a public meeting was held on Thursday, July 23, 2009 at the Visalia Convention Center in Visalia, California. Verbal comments made at the public meeting were documented by a court reporter. Commenters were also encouraged to submit follow-up written comments so that the full text and intent of their comments could be documented and addressed. Written comments, if submitted, were assigned separate letter designations as shown in the table below. A transcript of the verbal comments by the court reporter is provided in Chapter 3. Individual comments are identified alphanumerically, consisting of a capital ‘PM’ followed by a number. Comments are numbered sequentially. For example, the first comment is identified as PM-1.

Alternatives 2, 5 and 6 Comment Letters

During the process of reviewing SCE’s San Joaquin Cross Valley Loop Transmission Project, the EIR team at Environmental Science Associates (ESA) developed two transmission alignment alternatives in addition to those proposed by SCE: Alternative 5 and Alternative 6 (Alternative 5 was eventually dismissed in the CEQA screening process). During the development of Alternatives 5 and 6, information regarding the alternatives, including ESA’s data requests to SCE and SCE’s data responses, was published on the CPUC’s project website, <http://www.cpuc.ca.gov/Environment/info/esa/sjxvl/index.html>.

In response to this public information, the CPUC received 60 letters as well as a petition with 64 signatures in late May 2009, commenting primarily on Alternatives 2 and 6. Appendix F contains copies of these letters and the petition. Because the Draft EIR was in the process of final formatting for printing, these comments were not included in the Draft EIR document. However, to ensure that the comments in the letters are included as part of the CEQA process, ESA has reviewed all letters. The major concerns expressed in the letters and petition includes:

- Strong opposition to Alternative 6 and Alternative 2 for reasons that include, but are not limited to:
- Decreased property values
- Loss of use of prime agricultural land
- Concerns over loss of wells, pipelines, easements, etc. affecting agricultural and residential needs
- Violation of Native American village and burial sites
- Violation of historic pioneer sites
- Health concerns, including cancer and other health risks from EMF and power lines
- Negative impact on wildlife
- Aesthetic impacts to the natural landscape
- Impacts to the community of Elderwood and the City of Woodlake
- Impact would be borne by residents who are served by PG&E, not SCE
- Support for Alternative 3, which would affect a smaller number of residents, have less impacts to agriculture, and utilize more of an existing SCE line

The letters do not bring to light any potential impacts that were not already addressed in the Draft EIR. As such, all comments are considered by ESA to be addressed by the Draft EIR, and consequently, the Final EIR.

2.3 Responses to Comments

As required by Section 15132 of the Guidelines for CEQA, the responses in Chapters 4 through 8 address significant environmental issues raised by commenters during the review period. They are intended to provide clarification and refinement of information presented in the Draft EIR and, in some cases, to correct or update information in the Draft EIR. In some instances, the text of the Draft EIR has been revised in response to a comment, and the revised text is included as part of the response. Where responses have resulted in changes to the text of the Draft EIR, these changes are shown within the Draft EIR text using the following conventions:

- 1) Text added to the wording in the Draft EIR is shown in underline,
- 2) Text deleted from the wording in the Draft EIR is shown in ~~strikeout~~, and
- 3) Text changes are shown in indented paragraphs.

These text changes also appear in Chapter 8, *Revisions to the Draft EIR*, of this document.

Due to the repetitiveness of many issues raised by commenters, Chapter 4 includes master responses that provide a more comprehensive discussion of related issues. Chapters 5, 6 and 7 include responses to every individual comment, although sometimes a response refers the reader to either a master response or another response. Chapter 5 provides responses to comment letters received from organizations and public agencies, while Chapter 6 provides responses to comment letters received from individuals (i.e., members of the public). Responses to oral comments received during public hearings are located in Chapter 7.

Many comments received on the Draft EIR did not address the adequacy or accuracy of the environmental analysis or did not identify any other significant environmental issue requiring a response; rather, these comments were directed toward the perceived merits or demerits of the Proposed Project, provided information, or expressed an opinion without specifying why the Draft EIR analysis was inadequate. The CPUC, as the CEQA lead agency, acknowledges the receipt of these types of comments; however, limited responses are provided to these comments as they do not relate to the adequacy or accuracy of the Draft EIR or otherwise raise significant environmental issues.

As mentioned above, some issues received a substantial number of comments from numerous commenters, demonstrating common concerns among agencies, special interest groups, and members of the public. For these issues, a comprehensive discussion of the issues and related topics is presented as a master response in Chapter 4 of this document. Each master response provides an integrated and comprehensive response to a particular issue and related concerns. The master responses are listed below:

- 4.1 Agricultural Issues
- 4.2 Cultural Resources
- 4.3 Electric and Magnetic Fields (EMF)
- 4.4 Groundwater
- 4.5 Wells
- 4.6 Alternatives
- 4.7 Non-CEQA issues

2.4 List of Commenters and Comment Letters on Draft EIR

The following tables provide a list of all organizations and individuals who provided written or oral comments on the Draft EIR during and after the public comment period (June 16, 2009 through July 31, 2009).

**TABLE 2(RTC)-1
ORGANIZATIONS AND AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT EIR**

Comment Letter ID	Name of Commenter	Title	Organization/Affiliation	Copy of Letter on Page
O1	Dave Warner, Arnaud Marjollet	Director of Permit Services, Permit Services Manager	San Joaquin Valley APCD	3.1-1
O2	Conley Meling	Partner	Meling Bros	3.1-2
O3	Eric Meling	Partner	Meling Bros	3.1-2 to 3.1-3
O4	John Meling	Partner	Meling Bros	3.1-3
O5	William D. West	Manager	Stone Corral Irrigation District	3.1-4
O6	Bob Blakely	Director of Industry Relations	California Citrus Mutual	3.1-5
O7	Raul Gonzales	Mayor	City of Woodlake	3.1-6
O8	Kenneth Schmidt	Certified Hydrologist	Kenneth D. Schmidt and Associates (Groundwater Quality Consultant for PACE)	3.1-6 to 3.1-7
O9	Doug Phillips	President	Sentinel Butte Mutual Water Company	3.1-8
O10	Rene Miller	City Manager	City of Farmersville	3.1-8 to 3.1-32
O11	David Cairns	Partner	Kaweah Lemon Company	3.1-33 to 3.1-45
O12	David Cairns	Secretary/Manager	Wallace Ranch Water Company	3.1-46
O13	Jeffrey Single	Environmental Scientist	CA Department of Fish and Game	3.1-47
O14	Ken W. Womack	Owner	CJ Hammers Pump Co.	3.1-48
O15			Rocky Hill Incorporated	3.1-48
O16	Lou W. House	Ph.D.	PACE	3.1-49 to 3.1-64
O17	D. Zachary Smith		Ruddell, Cochran, Stanton, Smith, Bixlar & Wisehart, LLC (representing the Kaweah Delta Water Conservation District)	3.1-65 to 3.1-67
O18	David Bean	PG, CHg	AMEC	3.1-67 to 3.1-72
O19	Christopher Campbell	Attorney at Law	Baker Manock & Jensen (representing Paramount Citrus Association)	3.1-73 to 3.1-91
O20	Karen Norene Mills	Attorney at Law	California Farm Bureau Federation and Tulare County Farm Bureau	3.1-92 to 3.1-110
O21	Donald L. Fulbright	Builder/Developer	Donald Lawrence Construction Company	3.1-110 to 3.1-119
O22	Gregory S. Kirkpatrick		Farmland Conservation Strategies	3.1-120 to 3.1-121
O23	Winthrop Pescosolido		Merryman Ranch Company	3.1-122

TABLE 2(RTC)-1 (Continued)
ORGANIZATIONS AND AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT EIR

Comment Letter ID	Name of Commenter	Title	Organization/Affiliation	Copy of Letter on Page
O24	Albert J. Garcia	Senior Attorney	Southern California Edison Company	3.1-122 to 3.1-147
O25	Fran M. Layton, Erin Chalmers, Laurel L. Impett	Attorney at Law	Shute, Mihaly & Weinberger, LLP	3.1-147 to 3.1-190
O26	Brian Monaghan	Project Director/ Corporate Sales	Wildlands Inc.	3.1-191
O27	Paul-Albert Marquez	Central Planning Branch Chief	Department of Transportation	3.1-191 to 3.1-192
O28	Bill Gargan	Owner	Kaweah Pump Inc.	3.1-192 to 3.1-195
O29	Allan Ishida	District One Supervisor	Tulare County Board of Supervisors	3.1-196
O30	David Cairns	Secretary/Manager	Lemon Cove Ditch Company	3.1-197
O31	Dan Otis	Williamson Act Property Manager	Department of Conservation, Division of Land Resource Protection	3.1-198 to 3.1-200

**TABLE 2(RTC)-2
INDIVIDUALS WHO SUBMITTED COMMENTS ON THE DRAFT EIR**

Comment Letter ID	Name of Commenter(s)	Copy of Letter on Page
I1	Dr. and Mrs. David Bockman	3.2-1
I2	Kelly Anez	3.2-1
I3	Jenna Mattison	3.2-2
I4	Larry Ronk	3.2-2
I5	Robert McKellar	3.2-3
I6	Robert and Mary Edmiston	3.2-3 to 3.2-4
I7	Evelyn Hodel	3.2-4
I8	LaVerne Hodel	3.2-5
I9	Barbara VanWellen	3.2-5 to 3.2-6
I10	James Hitchcock	3.2-6
I11	William Maurer	3.2-7
I12	Barbara Ainley	3.2-8
I13	Elaine Breitbart	3.2-8
I14	Alan Hiatt	3.2-9
I15	Richard and Bernice Marshall	3.2-10
I16	Terrance Peltzer	3.2-11
I17	Billy and Peggy Pensar	3.2-11
I18	George Walton	3.2-12
I19	Amy Alley	3.2-12
I20	Ralph Alley	3.2-13
I21	Chris Corbett	3.2-13
I22	Gary and Rebecca Davis	3.2-14
I23	Jacob Deitz	3.2-15
I24	Melissa Deitz	3.2-16
I25	Joseph Ferrara	3.2-16 to 3.2-20
I26	Joyce Frazier	3.2-20 to 3.2-22
I27	Jose Luis and Rose Ann Gutierrez	3.2-22
I28	Terri Hacobian	3.2-23
I29	Nancy Hamlin	3.2-23
I30	Bob Hengst	3.2-24 to 3.2-25
I31	David Hengst	3.2-25 to 3.2-26
I32	Foster Hengst	3.2-26
I33	Linda Hengst	3.2-27
I34	Tammi Hitchcock	3.2-28
I35	Tom and Jennifer Logan	3.2-28 to 3.2-30
I36	Leroy and Sandy Maloy	3.2-30
I37	George McEwen	3.2-31 to 3.2-32
I38	John Pehrson	3.2-33

TABLE 2(RTC)-2 (Continued)
INDIVIDUALS WHO SUBMITTED COMMENTS ON THE DRAFT EIR

Comment Letter ID	Name of Commenter(s)	Copy of Letter on Page
I39	Barbara Peltzer	3.2-33
I40	Larry Peltzer	3.2-34 to 3.2-35
I41	Sarah Peltzer	3.2-35
I42	Karen Redfield	3.2-36
I43	Randy Redfield	3.2-36 to 3.2-37
I44	Del Strange	3.2-38
I45	Gary and Colene Tarbell	3.2-39
I46	Van Dellen (Lubbert)	3.2-40
I47	Van Dellen (Nancy)	3.2-41
I48	Van Dellen (Wayne)	3.2-42
I49	James Canterbury	3.2-42 to 3.2-43
I50	Kent and Gail Kaulfuss	3.2-43 to 3.2-45
I51	Douglas and Kaye Rydberg	3.2-45 to 3.2-47
I52	Cheryl Turner	3.2-47
I53	Stacy Kelch	3.2-48 to 3.2-49
I54	Jay and Nancy Culter	3.2-49 to 3.2-50
I55	B. Davis	3.2-51
I56	Lindsay Turner	3.2-51
I57	Delia Garza	3.2-52
I58	Rhonda Montgomery	3.2-53
I59	Jack and Kathy Pendley	3.2-53
I60	Doyle Ritchie	3.2-54
I61	Cliff Ronk	3.2-54 to 3.2-55
I62	Connie Sing	3.2-55
I63	Patricia Whitendale and family	3.2-56 to 3.2-59
I64	Lenora Graves	3.2-59
I65	Bowe and Brenda McMahon	3.2-60
I66	William Pensar	3.2-60 to 3.2-61
I67	Joe Sing	3.2-61
I68	Tony Calcagno	3.2-62 to 3.2-63
I69	Diane Heaton	3.2-64
I70	Joel Heaton	3.2-64 to 3.2-65
I71	Dale Kersten	3.2-65
I72	Trudy Wischemann	3.2-66 to 3.2-68
I73	Suzanne Bidwell	3.2-69
I74	Lorene Clark	3.2-69
I75	James Gordon	3.2-70 to 3.2-73
I76	Mary Gordon	3.2-73 to 3.2-74

TABLE 2(RTC)-2 (Continued)
INDIVIDUALS WHO SUBMITTED COMMENTS ON THE DRAFT EIR

Comment Letter ID	Name of Commenter(s)	Copy of Letter on Page
I77	Courtney Hengst	3.2-75
I78	Hayley Hengst	3.2-75
I79	John O. and Shirley B. Kirkpatrick	3.2-76 to 3.2-88
I80	McKenzie Family	3.2-88
I81	Arturo Ramirez	3.2-89
I82	Lynette Ramirez	3.2-89
I83	Hudson Rose	3.2-90
I84	Corky and Laura Wynn	3.2-90
I85	Scott Belknap	3.2-91
I86	DeLeondaris Family	3.2-91
I87	Bill Ferry	3.2-92
I88	James Jordan	3.2-92
I89	Robert Bennett Lea III	3.2-93
I90	Gus Marroquin	3.2-93
I91	Mike Olmos (City of Visalia)	3.2-94 to 3.2-95
I92	Alex Peltzer (City of Visalia)	3.2-95 to 3.2-96
I93	Mike and Sharon Potts	3.2-96
I94	Tami Tarbell-Lea	3.2-97
I95	Robert Ward	3.2-97
I96	Diane King	3.2-98
I97	Patty Colson	3.2-98 to 3.2-99
I98	Tony Calcagno	3.2-100 to 3.2-103

**TABLE 2(RTC)-3
INDEX OF PUBLIC HEARING TRANSCRIPT
VISALIA CONVENTION CENTER, VISALIA, CA – JULY 23, 2009**

Comment ID	Commenter	Title and Organization	Transcript Page #
PM 1-5	Jim Sullins	UC Coop Extension, County Director, Tulare County	3.3-2 to 3.3-4
PM 6	Foster Hengst	Christian Services Brigade	3.3-4
PM 7	David Hengst		3.3-4 to 3.3-6
PM 8	Linda Hengst		3.3-6 to 3.3-8
PM 9	Bob Hengst		3.3-8 to 3.3-9
PM 10	Darwin Hacobian		3.3-9 to 3.3-10
PM 11	Bob Blakely	Director of industrial relations for California Citrus Mutual	3.3-10 to 3.3-12
PM 12	Robert Edminston		3.3-12 to 3.3-13
PM 13	William Fox	Senior Pastor of Foothill Bible Church	3.3-14
PM 14-18	Jack Allwardt	Exeter City Council member	3.3-14 to 3.3-15
PM 19	Jose Martinez	Councilman for the City of Woodlake	3.3-15 to 3.3-16
PM 20-23	Eric Meling	Partner in Meling Brothers Citrus Ranches	3.3-16 to 3.3-17
PM 24	Rudy Garcia		3.3-17
PM 25	Bill Ferry		3.3-17 to 3.3-18
PM 26	James Jordan		3.3-18 to 3.3-19
PM 27-31	Doug Carman	Vice president of farming, Paramount Citrus	3.3-19 to 3.3-21
PM 32	David Bean	Principal hydro geologist with AME Geometrics in Fresno A professional geologist and certified Hydro geologist in California	3.3-22 to 3.3-24
PM 33	Randy Redfield		3.3-24 to 3.3-26
PM 34	Del Strange		3.3-26 to 3.3-27
PM 35-38	Tom Logan		3.3-27 to 3.3-28
PM 39	Doug Phillips	President -Sentinel Butte Mutual Water Company and also Owner-of Phillips Farms	3.3-28 to 3.3-30
PM 40	Scott Belknap	Owner of Belknap Pump Company	3.3-30 to 3.3-31
PM 41	Joe Ferrara		3.3-31 to 3.3-34
PM 42	James Gorden		3.3-34 to X35
PM 43	Wayne Van Dellen		3.3-35 to 3.3-36
PM 44	Joyce Frazier		3.3-36 to 3.3-36
PM 45	George McEwen		3.3-36 to 3.3-38
PM 46	Robert Ward		3.3-39 to 3.3-39
PM 47	Steve Worthley	Supervisor of Tulare County representing District 4	3.3-39 to 3.3-40
PM 48-50	Tricia Stever	Tulare County Farm Bureau	3.3-40 to 3.3-42

TABLE 2(RTC)-3 (Continued)
INDEX OF PUBLIC HEARING TRANSCRIPT
VISALIA CONVENTION CENTER, VISALIA, CA – JULY 23, 2009

Comment ID	Commenter	Title and Organization	Transcript Page #
PM 51-52	John Kirkpatrick		3.3-42 to 3.3-44
PM 53	Greg Kirkpatrick		3.3-44 to 3.3-46
PM 54	Johnny Sartuche	On behalf of the local Native American tribe, the Wuksachi	3.3-46
PM 55	Bill Pensar		3.3-46 to 3.3-48
PM 56	Trish Whitendale		3.3-48
PM 57-60	Paul Boyer		3.3-48 to 3.3-49
PM 61	Suzanne Farag	Member of Foothill Bible Church	3.3-49

CHAPTER 3

Comment Letters and Public Meeting Transcript

3.1 Letters from Organizations



Comment Letter O1

San Joaquin Cross Valley Loop Project
District Reference No. 20080526

Comment Letter O1
Page 2

July 1, 2009

Jensen Uchida
San Joaquin Cross Valley Loop Project
c/o Environmental Service Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Project: San Joaquin Cross Valley Loop Transmission Project

District Reference No: 20080526

Dear Mr. Uchida:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the subject project, consisting of replacing transmission lines, constructing an 18.5 mile long double circuit transmission line; installation of supporting structures; removal of wave traps; tuners, and installation of additional protective relays at Rector, Springville, Vestal, and Big Creek 3 Substations; and offers the following comments:

A. Construction Emissions – The EIR concludes that construction emissions will have a potentially significant impact on air quality but with mitigation these impacts from construction exhaust would be reduced to a less than significant impact. In order to conclude that the construction exhaust emissions would be less than significant, mitigation measures reducing construction exhaust emissions must be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines §15126.4, subd.(a)(2)). Feasible mitigation of construction exhaust emission includes use of construction equipment powered by engines meeting, at a minimum, Tier II emission standards, as set forth in §2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 Code of Federal Regulations. The District recommends incorporating, as a condition of project approval, a requirement that off-road construction equipment used on site achieve fleet average emissions equal to or less than the Tier II emissions standard of 4.8 NOx g/hp-hr. This can be achieved through any combination of uncontrolled engines and engines complying with Tier II and above engine standards.

O1-1

B. Table 4.3-4 in the DEIR presents a quantification of uncontrolled emissions that may be generated from the construction activities associated with this project. PM10 exhaust can be mitigated using a construction fleet that is equal to or less than Tier II emissions standards. Conversely, fugitive dust emissions can be mitigated using the measures detailed in mitigation measure 4.3-1b. For clarity, the District recommends the PM10 column be separated into two columns with separate total emissions values, one for fugitive dust emissions and the other for PM10 exhaust.

O1-2

C. The District uses an applied threshold of 15 tons per year to determine significance of PM10 emissions from fugitive dust. While most projects are not required to quantify fugitive dust emissions, large projects like this one may require quantification (GAMAQI Pg. 64, sect. 6.5.1, p. 3). The District recommends the emissions and mitigation measures be quantified to determine whether fugitive dust emissions will be less than significant after mitigation measures have been applied.

O1-3

If you have any questions or require further information, please call Kanya Ellington, M.S., at (559) 230-5934.

Sincerely,

Dave Warner
Director of Permit Services

for
Arnaud Marjollet
Permit Services Manager

DW:ke

Sayed Sadroin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
www.valleyair.org

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

July 21, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207



17456 Ave. 344
Visalia, CA 93292

Dear Mr. Uchida:

My family has farmed in the Elderwood area for over 50 years. One of our 70-acre citrus groves is in the path of the San Joaquin Cross Valley Loop Transmission Project. The power line will cut the grove approximately in half and require the relocation of possibly four wind machines. The problems associated with this action make our ability to farm this section of land difficult and perhaps impossible.

Relocation of the wind machines will move them closer to wind machines in the next citrus block. As a result, there will be less frost protection on the top half of the 70-acre block. Frost protection in this area of Elderwood is important as it can be colder than other areas and there is less water available to run in the winter for frost protection. Without water or wind protection, frost damage is assured and much of the fruit will be lost for the season. Trees will also suffer damage and will become weaker with each year of frost damage.

Obviously, the loss of the frost protection and the construction of the power line would mean the loss of much more acreage in this block of 70 acres than the DEIR states. The land would have no value to us for farming another crop as we farm only citrus products and are not equipped to dry farm. The land would also be worthless for sale as home sites since no one would want to live under the power line. It seems unreasonable to ask my family to sacrifice the value of this citrus producing acreage and be left with land that cannot be farmed.

Finally, farming under the power lines is not a liability we wish to assume. We will be losing the acreage under the power line because our current farming practices would require equipment with spray booms, etc. to operate under the lines. We are not willing to put our employees at risk of injury from working under the lines so we feel we cannot farm under the power line. That will mean a loss of acreage extending across the 70 acres in the path of the power line.

It is our sincere hope that SCE and the CPUC will reconsider the placement of the power line and locate it where there are fewer acres of permanent crops, which appears to be alternate route 3. The loss to our family as well as other small family farms on this route will be devastating.

Sincerely,

Conley Meling, partner
Meling Bros.
17456 Ave. 344
Visalia, CA 93292

O2-1

O2-2

July 21, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida:

I am a third generation citrus grower and one of the many family farms that will be affected by the Cross Valley Loop Transmission Project proposed by Southern California Edison. The recent draft environmental report preferred alternate route 2, which will cross one of the citrus properties my family owns. After reading the DEIR and considering its points, I have several concerns that I believe the report does not address or dismisses as unimportant.

First, the DEIR estimates the loss of acreage for route 2 at approximately 23 acres and the loss of acreage for SCE proposed route at approximately 30 acres. However, the report makes clear that the loss of acreage is based only on the footing size for each tower and not the 50-foot clearance area that SCE would require (4.2-13). Since the specifications for the tubular towers have a footing size of approximately 6-10 feet (3-14), the additional trees lost to gain a 50-foot clearance (2-40) increases the acres lost to much higher than 23 or 31 acres.

Second, the DEIR acknowledges that during construction there will be a loss of trees due to the excavation site of 100 x 100 feet at a minimum (3-14). During construction, the loss of acreage rises from the 20 acres to over 80 acres (4.2-17). The report further acknowledges that trees can be replanted in part of this area after construction but that production will not be regained for approximately 10 years (4.2-12). Under current economic conditions, such a loss of production for the timeline of construction and after could be devastating to many family farms. A reduction in profitability for any family farm during these uncertain times puts it at risk and increases the possibility of additional jobs lost for the community.

Next, the report seems to be unclear about the effects of construction and the final power line on irrigation systems. While it states that irrigation will be rerouted during construction, it fails to acknowledge that pumps as well as irrigation lines will need to be moved. Yet the DEIR makes clear on page 2-40, "no valves or controllers of any type would be permitted in the ROW." To move an existing pump is easier said than done. Water is a vital resource but also an elusive one in our area. The current drought has already weakened some wells and the prospect of moving a well that is currently producing enough volume is unreasonable. The chances that a new well would produce the same volume of water are slim-to-none, which would leave the property in danger of additional acres lost for production. The report alludes to this problem when it states on page 4.2-19, "Alternate route 2 could result in impacts to irrigation systems and/or ancillary farming systems that could result in the indirect conversion of farmland to nonagricultural use." The mitigation measures simply state that irrigation will be re-routed into

O3-1

O3-2

O3-3

temporary systems during construction (4.2-16). There is no mention in the mitigation measures for lines 03, controllers, wells, and pumps are under the proposed ROW and need to be relocated. Once again, if a viable well is eliminated from use, the entire acreage is in danger of being lost. Existing wells that function well are too valuable to be lost.

O3-3
cont.

The acreage lost to agriculture on alternate route 3 is much less than any of the other routes. The DEIR acknowledges that this route is the preferred one when it comes to agricultural resources. Much of the route crosses grassland that does not require pumps and irrigation systems like those needed for permanent crops. The likelihood is that wells and lines will need to be moved on all the routes except for route 3, which makes it better suited for SCE purposes. The only negative for route 3 is the vernal pools that are under the existing SCE line. It is my understanding that viable options have already been proposed to mitigate this issue by moving the line east of the vernal pools.

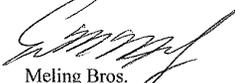
O3-4

Finally, the report does not consider the importance of wind machines and their placement in a grove to protect it from frost. One wind machine is strategically placed to protect 10 acres. The power line would force the removal of some wind machines and thereby compromise the frost protection for those 10 acres of fruit. The loss of production and eventually trees will increase when wind machines must be relocated and cannot adequately protect all sections of the grove.

O3-5

It is important to take into consideration the difficulties that the DEIR fails to adequately address. The water, wells, and pumps that will be lost unnecessarily are my greatest concern since water is so difficult to locate. The loss of agricultural land will surely increase from the estimate given in the DEIR. I would only support a route that would eliminate or severely limit the intrusion of the power line and its construction on permanent crops; thus, at this time, I would support route 3 as the best route. The risk to the existence of all family farms in our area is too great under the proposed DEIR report.

Thank you,



Meling Bros.
Eric M. Meling, partner
17456 Ave. 344
Visalia, CA 93292

Comment Letter O4

July 21, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida:

The Southern California Edison power line for alternate route 2, the Elderwood Gap line, would affect the ability of my family to run a profitable citrus business. During these uncertain economic times, the profitability of all businesses should be protected and encouraged. Instead, we find ourselves at risk of losing vital acreage and having our profits cut by the intrusion of the power line across our property.

O4-1

The SCE power line will cross a 70-acre section of our citrus property. Over the past 5 years we have worked to improve this property by replacing an older grove with new trees. These trees are just beginning to come into production and will take another 5 years to be in full production. As a result, we have already limited the profits from this section in order to plan for the future. The power line will remove many of our new trees and put us back to square one. As with any business, improvements are made at a cost and in citrus production that cost is not just in the taking out and replanting a grove but also in the loss of production. These costs are then projected over 10 years in order to ensure that the farm is able to absorb the costs. With the additional loss of trees to the power line, the projections we had assumed for this project are now incorrect. The economy in general is already unstable and additional losses will make it even more difficult to operate in the "black".

O4-2

In addition, farming under the power lines is not a liability we wish to assume. We will be losing the acreage under the power line because our current farming practices would require equipment with spray booms, etc. to operate under the lines. We are not willing to put our employees at risk of injury from working under the lines so we feel we cannot farm under the power line. That will mean a loss of acreage extending across the 70 acres in the path of the power line. The loss of acreage stated in the draft environmental impact report is much lower than the actual loss of acres.

Finally, we would hope that the SCE and CPUC would select a route that would not impact the farmer at a time when the economy makes it more difficult to sustain such a loss. Select the route that will not impact permanent crops and put the family farmer at risk of failure. That route appears to be alternate route 3. Thank you.

Sincerely,

John Meling, partner
Meling Bros.
17456 Ave. 344
Visalia, Ca 93292

STONE CORRAL IRRIGATION DISTRICT

Comment Letter O5

Comment Letter O5

Phone: 559-734-1370
Fax: 559-528-4408
Email: scid@clearwire.net

37656 Road 172
Visalia CA 93292-919

July 21, 2009

SCE San Joaquin Cross Valley Loop Transmission Project, (A.08-05-039)
(Alternate 2)

Attn: Mr. Jensen Uchida, Environmental Project Manager
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates

My name is William D. West, Manager of Stone Corral Irrigation District. I am submitting written comments on behalf of Stone Corral Irrigation District to give you the district's opinion on SCE's San Joaquin Cross Valley Loop Transmission Project (A. 08-05-039), proposed (Alternate 2).

First, let me thank you for giving the opportunity to submit comments on Edison's proposed transmission loop project. I will be making my comments regarding the (Alternate 2 project). Alternate 2 is proposed to run through my district after it crosses from the west to Road 156 entering the district with new Tubular Steel Pole structures (59-74) and increasing a 150' ROW traveling through the district to the east, crossing over the Friant-Kern Canal at Road 176 and Ave. 376 approximately 3,200 feet to the north, to parallel Road 176 until Avenue 376. The alignment would then proceed east, paralleling Avenue 376 and then southeast through a saddle along the base of Colvin Mountain until Road 194.

The district has (3) sub-laterals that run perpendicular through Edison's ROW that range from 10"-12" ID transite pipe, (1) 24" ID Cenviro main lateral pipe and (1) 54" ID flood control pipe which is 48" from top of pipe to ground surface. Edison's ROW would also run perpendicular over one of the districts flood control ditches that is 127 "feet" wide. Alternate 2 ROW would also require at least (1) grower turnout to be re-located and (1) continuous air-vacuum vent to also be re-located depending on the final constructed steel power pole ROW.

Alternate 2 not only permanently removes some prime agricultural land, it would also reduce the acreage in the district due to the fact that the landowners land is reduced. This affect would cause the district to increase its cost to all land to achieve the same operating expense in the district. The district has tried to reduce its operating cost every year to help its landowners. The district can't continue to reduce costs without harming the integrity of the district. This lose of acreage is small, but could increase an estimated

cost of \$ 7-10 per/acre for all the landowners.

Your project description on the installation of new tubular steel pole structures indicate they will be buried 20-60 feet deep and have an excavated diameter of six to ten feet. You had also specified that if the Foundations that extend into groundwater would require that mud slurry be placed in the hole after drilling to prevent the sidewalls from sloughing. The district has undefined aquifers throughout the entire district. Most of the wells have underground water stratus. The landowners that have wells are pumping on a very limited capacity because of very limited groundwater resources. Should any of the deep holes required for the steel poles have an underground water stratus, you could very well eliminate some underground water pumping capabilities for some landowners. This, in the view of my district is absolutely unacceptable to put its landowners at risk on damaging or even eliminating a precious water resource they rely on. Taken everything in consideration the district feels that Alternate 3 approach would be in the best interest of its landowners and everyone for the following reasons:

1. It uses more of the existing right-of-way, which meets the Garamendi Principles in SB2431
2. The route's primary negative is the Stone Corral Ecological Preserve which can easily be circumvented by moving the line a little to the west.
3. There is less damage to prime agricultural land-permanent crop, wells, drive rows, etc.
4. Alternates 1, 2 and 6 have more of a negative environmental impact to agriculture, communities and people.
5. The land use impacts to the City of Farmersville weren't adequately addressed in the DEIR.

Please accept this letter as the official disapproval of SCE San Joaquin Cross Valley Loop Transmission Project, (A.08-05-039)-Alternate 2.

Sincerely,

William D. West
Secretary/Manager

O5-2
cont.

O5-3

O5-4

O5-1

O5-2

**California Citrus Mutual Comments to The California Public Utilities Commission
July 23, 2009
Visalia, California**

Subject: Southern Calif. Edison's San Joaquin Cross Valley Loop Transmission Project
CPUC A.08-05-039
SCH #: 2008081090

DRAFT ENVIRONMENTAL IMPACT REPORT - Dated June 2009

Presenter: Bob Blakely, Director of Industry Relations
Representing: California Citrus Mutual
Located: 512 N. Kaweah Ave., Exeter, California

California Citrus Mutual (CCM), is the voice of the California citrus industry. CCM is a voluntary grower association of over 2100 members. Many of whom are family farmers in Tulare County and who stand to be impacted by this project. I appreciate the time and effort that has gone into the preparation of this draft EIR. I also appreciate this opportunity to comment on the EIR and the direct impact the project will have on citrus in Tulare County and more broadly on the California citrus industry. CCM members will be negatively impacted by any of the alternatives currently proposed for this project.

California and specifically the Central Valley is the world's largest producer of fresh citrus; supplying 80% of the fresh citrus produced in the U.S. Citrus production in California is primarily confined to a narrow band, approximately 10 miles wide and 200 miles long running along the foothills on the east side of the San Joaquin Valley. This is a unique microclimate of soil, water and temperature ideal for citrus production that is not duplicated anywhere else in California. It is truly an endangered industry. This project will eliminate land from citrus production that cannot be replaced.

There is a provision of the Williamson Act which may prohibit SCE from taking prime Ag land within the agricultural preserve. Section 51290, a) states, "It is the policy of the state to avoid, whenever practicable, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition therefor, in agricultural preserves."

All three of the alternatives currently being proposed for the SJVLTP will negatively impact prime irrigated, primarily citrus, Ag land. A California Citrus Impact Analysis and Policy Simulation conducted by Arizona State University determined that the California citrus industry represents nearly \$1.8 billion of economic value to the California economy and almost 15,000 jobs. Additionally, the industry represents \$825.6 million of direct economic output and \$1.633 billion when all upstream suppliers and downstream retailers are included, employing a total of nearly 25,000 direct and indirect workers. The study looked at the impact of losing 1,000 acres of oranges in one year, on the total California economy, and the orange sub-sector and found the loss in economic benefit to California to be substantial. Some \$4.39 million in total output for

O6-1

O6-2

the industry and \$7.4 million less activity for the state as a whole. Each 1,000 acres lost takes with it some 220 jobs and nearly \$1 million in annual state tax revenue. The long-term effect would be many times this. These dollar figures do not include the loss in aesthetic value of orchards or the environmentally beneficial sequestration capacity of the citrus trees.

CCM is opposed to the taking of any citrus acreage for additional rights-of-way where existing rights-of-way may be utilized to the same end. Additionally, when existing rights would be utilized for the SJVLTP, Southern California Edison should work with growers to minimize loss of production and the economic impact on affected growers. Growers in the existing right-of-way have recently sustained economic losses due the NERC mandate, which required growers to provide access and to remove trees in proximity of the existing towers within the right-of-way. In many cases this resulted in loss of trees not in the existing right-of-way. Growers within the affected right-of-way will be subjected to additional compounded losses as a result of the SJVLTP. As the old towers are removed growers will be left with unplanted areas where productive trees were recently removed. They will, in all probability, be required to remove additional trees for the new, albeit, fewer towers. Had Southern California Edison been more forward looking the economic loss to growers and a public relations nightmare could have been avoided.

Table 5-1 of the Draft EIR summarizes the significant unmitigable environmental impacts of each alternative. The statement under each alternative states in part: "Significant unmitigable impacts on agricultural resources include permanent removal". In the course of rendering a decision California Citrus Mutual requests that the CPUC reject the San Joaquin Cross Valley Loop Transmission Project.

Alternatively, if the CPUC determines the project is essential, it would be the desire of the citrus industry that the CPUC require Southern California Edison to construct the SJVLTP along a route that minimizes the taking of additional prime Ag land for new right-of-way, but instead utilizes only existing right-of-way wherever possible. Further, the CPUC should direct SCE to work with affected growers to retain and/or reestablish as much vital production acreage within the right-of-way as possible and still comply with the DHS and NERC requirements.

Thank you for this opportunity to provide these comments.

Respectfully,


Bob Blakely,
Director of Industry Relations

cc Mr. Jensen Uchida, San Joaquin Cross Valley Loop Transmission Project

O6-2
cont.

O6-3



350 NORTH VALENCIA BOULEVARD • WOODLAKE, CA 93286-1244

PHONE (559) 564-8055 • FAX (559) 564-8776
www.cityofwoodlake.com

Comment Letter O7

July 23, 2009

California Public Utilities Commission
San Francisco Office
San Francisco, CA 94102

Re: DEIR -- San Joaquin Cross Valley Loop Transmission Project

To Whom It May Concern:

Recently the Woodlake City Council had the opportunity to review the Draft Environmental Impact Report (DEIR) for the San Joaquin Cross Valley Loop Transmission Project (Project). The City Council supports Edison's attempt to deliver electricity in the most efficient manner. After thoughtful consideration of the impact of this project on our community, we, the Woodlake City Council, would like to go on record as voicing our opposition to Alternative 2. Specific comments are as follows.

- 1. Mitigation Measure 4.2-2 provides for farmland conversion easements that are to be required be obtained in the same County as the farmland is taken out of production. We would like these same standards as to easements in the same county, for Mitigation Measures 4.4-2b, 4.4.8, 4.4.9b. O7-1
- 2. Figure 4.4-4 on page 4.4-14 shows a map of critical habitat. Alternative 2 traverses through both Hoover's Spurge as well as the San Joaquin Valley Orcutt Grass, but the narrative on page 4.4-18 only discusses these plants in the context of alternative 3. O7-2
- 3. It seems to us that if you tell the Edison Co. to go back, re-route alternative 3 around the Stone Corral Ecological Reserve, do an addendum to the DEIR, and incorporate that addendum in the Final EIR you have made alternative 3 the environmentally superior alternative. O7-3
- 4. In terms of "people impacts", alternative 3 impacts fewer property owners and fewer residents of our County. We should be working together to impact as few of our residents as possible. Alternative 3 impacts the fewest people. O7-4

If you have any questions, or if I can be of assistance, please feel free to contact me.

Sincerely,

Raul Gonzalez, Jr.
Mayor

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS
600 WEST SHAW SUITE 250
FRESNO, CALIFORNIA 93704
TELEPHONE (559) 224-4412

Comment Letter O8
July 23, 2009

Mr. Jensen Uchida, CPUC Project Manager
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Re: Southern California Edison Co.
Cross Valley Loop Project
CPUC Applic. A.08-05-039

Dear Mr. Uchida:

We have been retained by PACE (Protect Agriculture Communities and Environment) to review the hydrogeologic aspects of the DEIR. The focus of my comments are primarily on the issue of supply well destruction and replacement. The proposed mitigation measure 4.7-11b indicates that a well inventory would be conducted and wells identified that "would not have the minimum ground clearance to perform any necessary well maintenance...". "A qualified water well drilling contractor" would be engaged to "relocate these wells to another location". This mitigating measure is indicated (Page ES-21) to render the residual impact "less than significant".

The groundwater discussion on Page 4.6-3 is very minimal and inadequate. For example, there is virtually no discussion of alluvial aquifers in the valley (ie depths, types of sediment, layering, and other features). For the foothills, there is virtually no discussion of groundwater in the weathered rock or hardrock. Well depths, yields, drawdowns, and other characteristics are not discussed. Lastly, there is no discussion of types or numbers of wells in specific areas.

For example, in the alluvial part of the area, both gravel

packed wells with perforated casings (generally drilled by direct or reverse rotary) and wells without gravel packs and sometimes without perforated casing (open-bottomed wells) are present. In the foothills and near the east edge of the valley, many wells tap hardrock or the overlying weathered rock. A unique type of well is present in this area, and is termed the lateral, radial, or wagon-wheel well. These wells are comprised of a large diameter vertical shaft, and a lower part, where a chamber was blasted out and many laterals generally hundreds of feet long were drilled by diamond drilling, normally near the base of the weathered zone. To my knowledge, these wells are no longer drilled, primarily because of OSHA issues. Thus it may not be possible to "relocate" such wells. In addition, water production and groundwater quality in the hardrock are often highly variable laterally. The DEIR infers that wells everywhere in the area can be readily replaced. While this may be possible in much of the alluvial area, it is not so easy near the east edge of the valley or in the foothills. Replacement of a well just for yield purposes could result in a well producing different water quality. Common problems with groundwater quality along the east edge of the valley are nitrate, iron, manganese, arsenic, and uranium.

It is unlikely that one "drilling contractor" could do all of this work. For example, many private domestic wells in the valley are drilled by the direct rotary or cable-tool method. Large capacity wells are usually done by the reverse rotary or cable-tool method. Hardrock wells are done by the air-rotary method. These types of wells are generally not done by the same contractor. Lateral wells are no longer done.

My review of the alternative alignments indicates that Alternative No. 3 would generally be the least problem in terms of having to mitigate existing water supply wells. This is primarily because of its more westerly location, compared to other alternatives. On the other hand, Alternatives No. 1, 2, and 4 appear to have the most problems in this regard.

O8-1
cont.

O8-2

Sincerely yours,



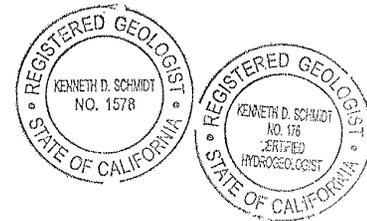
Kenneth D. Schmidt

KDS:jn

Geologist No. 1578

Certified Hydrogeologist No. 176

cc: PACE



Sentinel Butte Mutual Water Company

Supplying water since 1898
Incorporated 1948
P.O. Box 606
Woodlake, CA 93286



July 23, 2009

The Sentinel Butte Mutual Water Company has provided superior quantities and quality of water in the Woodlake and Elderwood area since 1898.

The proposed routes 2 and 6 will cross multiple water lines and will travel directly over one of the best producing water wells in our system. It is a wagon wheel type well that cannot be duplicated due to government agency restrictions. Sentinel Butte is stretched to its limits in drought years. The elimination of the well will jeopardize the entire water company in a time that no water can be easily replaced. The wells have been placed in the best areas for maximum yield. If we are forced to move our wells there is no guarantee that we will obtain any water. You cannot simply move over a little bit and expect to find a similar quantity of water or else it would have already been done. Any loss of water will be significantly more costly than just an easement strip as hundreds of acres of prime productive orchards will be eliminated.

O9-1

Our water lines crisscross and in some instances run parallel to the proposed Power Lines. The relocation of these lines has not been properly addressed in the EIR. The agricultural and irrigation distribution mitigation measures referenced in the EIR are erroneous and incomplete.

O9-2

We know that progress must take place in order to maintain a strong economic base. However route 3 makes much more sense. Route 3 will negate much of the economic and social problems associated with all of the other routes. The vernal pool area between the towns of Yettem and Seville off of Avenue 384 have existing Edison towers and easements. These are quite old and do not appear to be in great condition. Accordingly, the additional cost of replacing this old section using route 3 shouldn't be given much consideration when weighing comparative expenses of other routes. I also believe that they should be able to mitigate damage to the vernal pools by careful tower and line placement. Sentinel Butte Mutual Water Company strongly urges that SCE and the CPUC do the right thing and take the northern route.

O9-3

Yours truly,

Doug Phillips
President
Sentinel Butte Mutual Water Company



City of Farmersville

July 24, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

RE: Comments on Draft Environmental Impact Report –
Southern California Edison's San Joaquin Valley Cross Valley Loop
200KV Transmission Line Project
CPUC A.08/05-039
SCH # 2008081090

The purpose of this letter is to provide comments regarding the Southern California Edison's San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project Draft Environmental Impact Report (DEIR) on behalf of the City of Farmersville.

The City of Farmersville appreciates the opportunity to comment on the DEIR. It is understood that the project is necessary to provide safe and reliable electrical service and increase transmission capacity within the service area. The City supports the project objectives.

The City concurs with the conclusions of the DEIR that the program objectives can be achieved through any of a number of several project alternatives that are environmentally superior to the Proposed Project, however the City Council has voted to support Alternative 3, which the Council believes would achieve the project's goals with the least amount of impact – in particular to the City of Farmersville. Attached are City of Farmersville Resolutions 2008-11 and 2009-08 which state that the City of Farmersville formally opposes the Proposed Project (Route 1) and supports Alternative 3.

PROJECT OVERVIEW AND CONCERNS

The Proposed Project would divide the city by the creation of a 100 foot wide physical swath of undeveloped land and visual obstruction through the City of

Farmersville's existing City Limits and Urban Development Area – which includes future planned neighborhoods, commercial and industrial areas. The project would thwart the City's efforts to achieve a well planned community that supports efficient development and respects the aesthetic values of its citizens, as expressed in the Farmersville General Plan Land Use, Circulation, Conservation/Open Space, Parks and Recreation Elements adopted November, 2002 and the City of Farmersville Highway 198 Corridor Specific Plan adopted in 2003.

Specific to the City of Farmersville, the DEIR does not adequately analyze and address the effects of the Proposed Project associated with the following potential impacts:

- Aesthetics
- Agricultural Resources
- Land Use, Planning, and Policies
- Recreation
- Utilities and Services Systems

The following sections discuss the issues and concerns relative to impacts associated with each potential category of impact.

AESTHETICS

The Proposed Project would traverse through Farmersville's existing City Limits and Urban Area Boundary to the complete east-west extent. The DEIR states that "The visual analysis (in the DEIR) focuses on travel route views, and parks and recreational views." ¹ The DEIR does not include meaningful visual analysis of the views that would be experienced by the nearby residents and residents of Farmersville as they work, play, go to school and go about their daily activities in their homes and throughout the community, and the document should be amended to include that analysis.

DEIR Section 4.1 Aesthetics refers several times to the "limited number of viewers..." ² of the proposed transmission lines in and around Farmersville. There is little acknowledgement of the major residential subdivisions in proximity the Proposed Project, specifically those located on the west side of Farmersville, north of Walnut Avenue. The DEIR does not describe or discuss the visibility of the Proposed Project from points of high concentrations of people in the community, such as Liberty Park or Farmersville High School. The DEIR does not describe the substantial

¹ Southern California Edison's San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project DEIR p. 4.1-1

² Southern California Edison's San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project DEIR, p. 4.1-10

alteration to the viewshed the Proposed Project would present to the community as a whole.

The DEIR comment, page 4.1-45, that the "proposed alignment would not appear visually prominent as the viewshed has been highly modified with existing utility infrastructure, including wood poles along the left side of the road (Farmersville Blvd) and utility poles in the background" does not adequately describe the visual impacts of the Proposed Project. The Proposed Project consisting of a series of structure 120 to 160 feet tall connected with transmission lines would create a visual band in the skyline across the entire east-west extent of the community. The existing wood utility poles along roadways would not obscure the visual impact of the Proposed Project.

The DEIR indicates on page 4.1-49, Park and Recreation Areas, that two parks and recreation areas are included in the study area. The DEIR omits acknowledgement of City of Farmersville's Liberty Park, located on the north side of Teddy Ave., west of Farmersville Blvd. The site is located less than 2,000 feet from the proposed project and clearly there would be obstructed views of the Proposed Project to users of the park facility. The DEIR should analyze potential impacts to the park users.

As is evident in Figures 4.1-5b and 4.1-6b, the Proposed Project will impair views of the Sierra Nevada and become the visual backdrop for a portion of the community. The predominant visual feature entering the city from Highway 198 will be the transmission lines. The predominant visual feature for those living/working south of the Proposed Project will be the transmission lines which will obscure the scenic vista of the Sierra Mountains.

Figure 4.1-5a and 4.1-5b in the DEIR show a simulation of the existing and "after project" view looking north on Farmersville Blvd. The City believes that the horizontal extent of this view is too constrictive. On a clear day with good visibility of the mountains, residents would likely look to the northeast - to enjoy the view of the mountains. The proposed transmission facilities would significantly degrade this view. The simulation provided also minimizes the impact by showing only one tower.

Discussion on 4.1-45 is as follows:

"Furthermore, Mitigation Measure 4.1-5 would require surface treatment measures (i.e., appropriate colors, finishes, textures) to reduce visibility of the Proposed Project from sensitive viewers, including visibility of new Structures #20 and #21 from Farmersville Boulevard. With implementation of Mitigation Measures 4.1-5, impacts to Farmersville Boulevard would be less

O10-1

O10-1 cont.

O10-2

O10-3

O10-4

O10-5

than significant, because the proposed transmission line would result in an incremental visual effect that would not substantially alter the intrinsic character of the existing roadway view in terms of its composition and the general scale of landscape elements."

No evidence is provided that mitigation measures cited will reduce the aesthetic impact to a less than significant level. The DEIR should include photo simulations showing examples of "with" and "without" mitigation. The City is forced to take it on the DEIR's word that this mitigation measures will be sufficient.

Finally, the City questions the statement on p. 4.1-45 that

"...impacts to Farmersville Boulevard would be less than significant, because the proposed transmission line would result in an incremental visual effect that would not substantially alter the intrinsic character of the existing roadway view in terms of its composition and the general scale of landscape elements."

Using this logic, virtually anything could be constructed in this area and have less than a significant impact – simply because it was constructed "incrementally" - after previous improvements. The question must be asked – what kind of project (if any) would be considered to have a significant visual impact in this location? Would it have to be an office building the size of the Sears Tower?

AGRICULTURAL RESOURCES

The Proposed Project would displace 15+ acres of planned urban development, as the transmission lines, as proposed, would bisect land designated for industrial and General Commercial land use. This estimate of displaced land does not take into consideration the land designated for urban development that would be lost due to inefficiencies of land development that would occur associated with impacts of a 100 foot transmission line right-of-way cutting through parcels possibly making properties difficult to develop and inefficiencies of providing utilities and infrastructure and local/collector road systems in order to avoid requirements/restrictions of intrusion into the right-of-way. Nor does this estimate address the increased pressures to expand the Urban Development Boundary and City Limits to provide land eligible for development more distant to the location of the lines, as it is likely preferred development sites will not be those directly adjacent to the power lines.

O10-5
cont.

O10-6

O10-7

Land that is designated for urban use that would be displaced by the Proposed Project would need to be replaced elsewhere. Soils in and around Farmersville are considered "Prime Farmland".³ Expansion of development boundaries to accommodate the Urban Land lost due to impacts associated with the Proposed Project will lead to the permanent reduction of agricultural lands. The DEIR Section 4.2 Agricultural Resources, page 4.2-15 fails to include a discussion and identify impacts regarding the loss of additional agricultural land that must be consumed - as land utilized for the Proposed Project eliminates land designated for urban development. CEQA Guidelines Appendix G, II c. provides for this discussion of these types of impacts to Agricultural Resources as the question is asked, "Would the project : ... c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use". The DEIR should include an analysis of these impacts, particularly with respect to the known loss of urban developable land within the transmission line right-of-way, which would need to be replaced, likely on "Prime Farmland."

The impact of the loss of this agricultural land supports the consideration that existing transmission line right-of-way should be used to the maximum extent possible. Each one of the Plan Alternatives mitigates this loss of Prime Farmland.

LAND USE, PLANNING AND POLICIES

The Proposed Project is contrary to Farmersville's policies regarding land use and planning. Farmersville's planning policy documents are designed to promote development that follows Smart Growth principles with efficient use of land and that fosters an aesthetic quality for the community that will promote community pride and create a positive environment for economic prosperity.

The Proposed Project will displace 15+ acres of industrial and commercial land, requiring expansion of development boundaries, likely to be on Prime Agricultural land. The visual impact of the Proposed Project will hinder the ability to establish an attractive entrance to Farmersville from Highway 198.

Specifically, the following is a list of Farmersville's Goals and Policies that are in conflict with the Proposed Project:

³ City of Farmersville General Plan Part II, p. 3.4

O10-7
cont.

O10-8

Farmersville General Plan:
Goals, Objectives and Policies

- Create a unique and attractive city by investing in projects that will enhance Farmersville's appearance and marketability
- Protect and preserve natural resources, such as farmland, air and water quality and native vegetation while facilitating growth of the community
- Foster an attractive, clean and well-maintained community
- Create a community that portrays an image that is progressive and energetic
- Promote commercial development that is attractive
- Ensure that adequate land exists for future commercial and industrial development
- The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198

Attached is Farmersville General Plan page 2-67, which summarizes the importance the community places on the State Highway 198 corridor, stating in part "Highway 198 is Farmersville's "front door" to the world."

The DEIR does not identify any impacts regarding issues of consistency with the various agencies plans and policies. Section 4.9.4 b focuses on the permitting process for the installation of the transmission lines of the various agencies, but noted that "because the public utility is exempt from local land use zoning regulations and discretionary permitting, this land use consistency analysis is provided for informational purposes." As the California Public Utilities Commission will be utilizing the Environmental Impact Report as a decision making tool in determining the appropriateness of the Proposed Project and Plan Alternatives, it is appropriate that the document include an analysis of community plans and policies that are applicable to the proposed physical presence of major transmission lines becoming a permanent fixture in the community. This type of analysis would help the decision makers be aware of and understand the goals and values of the community through which the project is proposed to traverse. The DEIR is absent of that analysis.



O10-8
cont.

In regards to potential retail commercial development, the City is attempting to attract on north Farmersville Blvd in the Project Area, on page 4.9-13 the following statement is provided:

"However, at the time of publication of this Draft EIR, no applications to develop any specific parcel(s) and/or change the existing land use designations have been received by the City (Miller, 2009); therefore potential land use conflicts associated with the implementation of the Proposed Project will not be discussed further in this EIR in either the context of existing land use or in the cumulative scenario regarding the Highway 198 Corridor Specific Plan."

The City believes that no justification has been given why this issue should not be discussed and acknowledged. The City has recently completed a series of amendments to the land use and zoning designations for parcels in this portion of the community – which are intended to act as a tool to attract much-needed commercial and industrial development. Resolutions, an ordinance and maps are attached to this letter that illustrate these land use and zoning amendments. The DEIR should be revised to include discussion of these amendments and the project's potential impacts on these land use and zoning designations – and the City's ability to attract much-needed development.

RECREATION

The City of Farmersville Highway 198 Corridor Specific Plan provides for two storm drainage park/ponds within the planning area. The plan states that "All ponding basins shall be multi-use whenever possible..."⁴ The Proposed Project appears to bisect the park/pond located north of Avenue 291, between Farmersville Blvd. and Road 168, with the 100 foot wide transmission line right-of-way. DEIR Figure 2.3b identifies new access roads to be constructed within the right-of-way. The DEIR should identify the proximity of the Proposed Project to the planned facility, and if it encroaches into the facility, the DEIR should identify potential impacts and propose mitigation measures to address the impacts associated with the loss of recreational opportunity that may result from the Proposed Project.

On page 4.13-3 under "Parks and Recreation", the DEIR includes the statement: "The City of Farmersville does not have a system of bike paths, and as of 2008 had no plans for such a system (Martinez, 2008)."

⁴ City of Farmersville Highway 198 Corridor Specific Plan, p 4-22

This statement is erroneous. The Circulation Element (p. 3-27 to 3-28) includes policies regarding the establishment of a system of bike paths in the community, including on Arterial and Collector Roadways (which include Farmersville Boulevard and Road 168 in the Project Area). Further, both the Circulation Element and the Conservation, Open Space, Parks and Recreation Element include policies regarding establishment of a system of walking and cycling paths along certain waterways in the community. The Tulare Irrigation District channel located west of Farmersville Boulevard is planned to include these facilities in the future as development occurs adjacent to the channel. The DEIR should be amended to describe how these facilities could be affected by the Proposed Project.

O10-11
cont.

UTILITIES AND SERVICES SYSTEMS

The DEIR omits any acknowledgement of the City of Farmersville Highway 198 Corridor Specific Plan in Chapter 4.15, Utilities and Service Systems, commencing on page 4.15-1. The City of Farmersville Highway 198 Corridor Specific Plan identifies plans for Sanitary Sewer, Water and Storm Drainage. The DEIR should include an acknowledgement of the Specific Plan and include an analysis of the potential impacts of the Proposed Project on each of the planned public service systems included in the document.

Requirements associated with the construction and maintenance of the Proposed Project is included in the DEIR. The DEIR should include an evaluation and analysis of these requirements relative to each of the plans for Sanitary Sewer, Water and Storm Drainage contained in the Farmersville Highway 198 Corridor Specific Plan.

O10-12

With specific regard to the Highway 198 Corridor Specific Plan Storm Drainage plan⁵, the Proposed Project appears to bisect a park/pond basin. The park/pond facility is intended to ... serve as terminal retention or detention facilities prior to storm water being pumped into the Tulare Irrigation District's system after peak flows in the system subside or retained and infiltrated.⁶ It can therefore be assumed there will be standing water in the facility from time to time. The DEIR should clarify if the Proposed Project would be situated in the storm park/pond facility and whether the location of the tower and proposed new access roads, which would be underwater at times, can fulfill the project objectives. If it is determined that the specific proposed transmission line alignments should be altered to avoid the facility, analysis of impacts to existing and planned land uses resulting from the relocation should be conducted.

⁵ City of Farmersville Highway 198 Corridor Specific Plan, Figure 4-13

⁶ City of Farmersville Highway 198 Corridor Specific Plan, 4-22

MISCELLANEOUS COMMENTS

The DEIR would be improved and clarified by showing the proposed project route plotted on the city's General Plan Land Use and zoning diagrams.

O10-13

On Page 2-1. (Section 2.2 Project Location) the DEIR states:

"The Proposed Project is located in north western Tulare County, California near the cities of Visalia, Farmersville, and Exeter." This sentence should be rephrased to clarify that the Project route is actually **within** the city limits of the City of Farmersville

O10-14

SUMMARY

In summary, the Southern California Edison's San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project Draft Environmental Impact Report (DEIR) does not adequately address the impacts associated with Proposed Project relative to the existing conditions and City of Farmersville's adopted plans and policies.

Recent data indicate that Farmersville's poverty and unemployment levels are among the worst of Tulare County cities (and the San Joaquin Valley as a whole). The Proposed Project will thwart the City's attempts to improve its economy and the lives of its citizens – by attracting new commercial and industrial development – to create jobs and generate tax revenues – because the project will compromise the City's primary stock of lands available for these types of development.

O10-15

The DEIR should be amended to address the issues identified in this correspondence. Project alternatives identified in the DEIR are both environmentally superior to the Proposed Project and are capable of accomplishing the project objectives while avoiding significant impacts to the City of Farmersville. It is requested that California Public Utilities Commission consider the negative and adverse environmental impacts that the Proposed Project would impose on the City of Farmersville and choose one of the alternatives that achieve the program objectives (Farmersville City Council recommends Alternative #3), while considering and respecting the living environment of the residents of Farmersville.


René Miller
City Manager

cc: Farmersville City Council

2008-11

**RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF FARMERSVILLE IN OPPOSITION TO THE PROPOSED CROSS VALLEY
LOOP ROUTE 1 THROUGH FARMERSVILLE CITY LIMITS**

Attachments: City of Farmersville Resolutions Nos. 2008-11 and 2009-08
City of Farmersville General Plan page 2-67&68
City of Farmersville Resolution 2009-56 (amending the
Farmersville General Plan Land Use Element and Highway 198
Specific Plan)
City of Farmersville Ordinance No. 448 (adopting Zone Change
2009-01)

WHEREAS, it is stated that Tulare County faces shortages in supply of electricity in the future;
and

WHEREAS, Southern California Edison Company (SCE) supplies electricity to the Tulare
County area; and

WHEREAS, SCE is proposing to the California Public Utilities Commission a proposed plan and
two alternate routes to supply the additional electricity to Tulare County Grid; and

WHEREAS, the proposed Route 1 will slice through the northern portion of our City in an area
that has been reserved for economic development and includes a portion of the City's
Redevelopment Area thereby eliminating the productive use of at least a 100 foot strip of land
through this area of the City not to mention the many other land owners along this route who
farm and have homes that will be adversely affected by this project; and

WHEREAS, Alternate Route #3 would utilize much more SCE existing right-of-way and cross
over grazing land which would affect only 7 land owners; and

WHEREAS, the City (which qualifies as an economically disadvantaged community)
desperately needs the tax revenue to be generated by not only the 100 foot strip, but neighboring
properties as well that could provide jobs and services to the residents of the community; and

WHEREAS, the proposed project Route 1 would be detrimental to the property owners
developing the sites who would likely now be deterred from locating commercial and industrial
development in this area designated for this needed development, and

WHEREAS, the siting of power transmission lines along the proposed Route 1 will cut across
our City's entrance from State Highway 198 along Farmersville Boulevard marring the view
along this proposed scenic entrance to our community forever.

NOW, THEREFORE, BE IT RESOLVED BY THE City Council of the City of Farmersville
that we hereby oppose SCE's Proposed Route 1 and support SCE's Route 3.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of
Farmersville held on April 14, 2008, by the following vote:

AYES: Santana, Boyer, Hosier, Benavides
NOES: None
ABSENT: Rowlett
ABSTAIN: None

APPROVED: 
Leonel Benavides, MAYOR

ATTEST: 
Rosemary Silva, CITY CLERK

2009-08

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FARMERSVILLE IN SUPPORT OF SOUTHERN CALIFORNIA EDISON ALTERNATIVE ROUTE 3

WHEREAS, Tulare County faces shortages in supply of electricity in the future; and

WHEREAS, Southern California Edison Company (SCE) supplies electricity to the Tulare County area; and

WHEREAS, SCE proposed to the California Public Utilities Commission a plan and two alternate routes to supply the additional electricity to Tulare County Grid; and the California Public Utilities Commission is recommending variations of the proposed routes

WHEREAS, the PUC suggested routes will still affect valuable farm land and inflict hardship on the farmers as well as reduce jobs to residents of Farmersville, and

WHEREAS, Alternate Route #3 would use existing right of way and cross over grazing land which would affect only 7 land owners; and

NOW, THEREFORE, BE IT RESOLVED BY THE City Council of the City of Farmersville that we hereby continue to support the development of SCE's Route 3.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Farmersville held on February 23, 2009, by the following vote:

AYES: BENAVIDES, BOYER, HOSIER, ROWLETT, SANTANA
NOES: NONE
ABSENT: NONE
ABSTAIN: NONE

APPROVED: [Signature] Leonel Benavides, Mayor

ATTEST: [Signature] Rehe' Miller, Acting City Clerk

Part I: General Plan

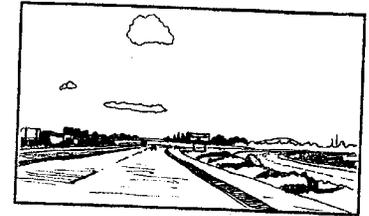
Farmersville General Plan • 2000 - 2025 Chapter 2: Land Use Element

State Highway 198

Highway 198 is Farmersville's "front door" to the world. Daily, thousands of vehicles pass by Farmersville on the highway. A number of these vehicles carry international visitors bound for the scenic wonders of Sequoia National Park.

As the city's front door, the City should try to create as attractive an image as possible. This goal is not only for aesthetic reasons but is also economic. Travelers do not want to stop at a location they perceive as unattractive or unsafe.

Likewise, business owners will not choose to locate their firms in a community that does not appeal to them. Establishing an attractive highway presence can help Farmersville bolster its economic development. The City can also take the opportunity to attract retail commercial businesses (such as an automobile dealership) that prefer a high visibility location along the highway. The sales tax benefits for the City could be significant.



View looking east on Highway 198

Goals, Objectives, Action Plans

- I. The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198.
1. The Land Use Map designates a combination of Highway Commercial and Industrial land uses along the highway.
2. Require attractive landscape and building designs that will reflect positively on Farmersville.
a. Establish a special "Highway 198" overlay zone that incorporates special building, landscaping, screening and signage requirements.
3. Erect "Welcome to Farmersville" signs at the interchange of Highway 198 and Farmersville Boulevard.
a. The City, Chamber of Commerce and to-be-formed Beautification Committee should

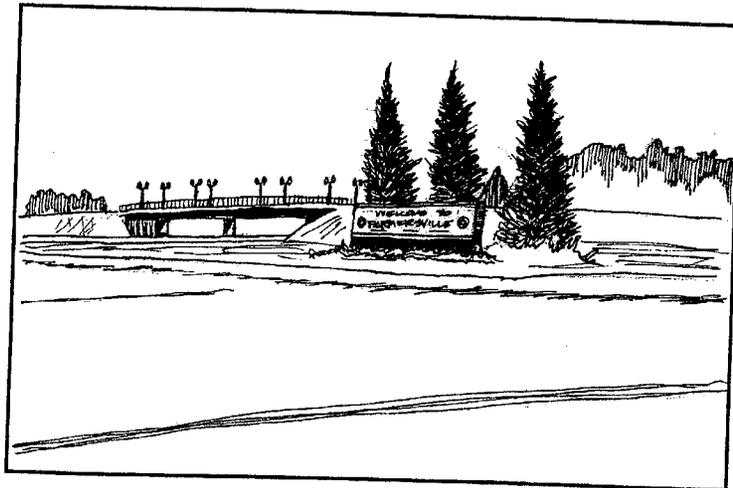
Highway 198 is Farmersville's "front door" to the world. First impressions can "make or break" a community's chances of attracting new development and revenue. . .

Part I: General Plan

Farmersville General Plan • 2000 - 2025
Chapter 2: Land Use Element

work together to design, raise funds and establish community identification signs.

- 4. Work with Caltrans to establish landscaping within the freeway right-of-way.
- 5. Work with Caltrans to transform the Farmersville Boulevard overpass bridge into an attractive design element. Antique light poles, black wrought-iron railing and banners could be considered.
 - a. The City Manager should open a line of contact with Caltrans to pursue completion of these objectives.



View of Highway 198/Farmersville Boulevard interchange shows "Welcome to Farmersville" sign, landscaping, and decorative light fixtures on the bridge.

RESOLUTION 2009-56

BEFORE THE CITY COUNCIL
CITY OF FARMERSVILLE
COUNTY OF TULARE, STATE OF CALIFORNIA.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FARMERSVILLE APPROVING AMENDMENTS TO THE GENERAL PLAN LAND USE MAP AND THE HIGHWAY 198 SPECIFIC PLAN LAND USE MAP TO IMPLEMENT OBJECTIVES AND POLICIES OF THE 2002 FARMERSVILLE GENERAL PLAN AND HIGHWAY 198 SPECIFIC PLAN, AND TO ENSURE CONSISTENCY BETWEEN LAND USE AND ZONING DESIGNATIONS.

WHEREAS, the 2002 Farmersville General Plan includes a variety of policies encouraging the City to take steps to strengthen Farmersville's commercial and industrial areas, and

WHEREAS, one of the General Plan's recommendations is for the City to create a highway commercial zone district, with special standards relating to permitted uses and property development, including landscaping, screening and quality design, and

WHEREAS, land uses permitted in the highway commercial zone are those geared to the traveling public, such as restaurants, service stations, lodging, retail commercial and related complementary uses, and

WHEREAS, both the General Plan Proposed Land Use map and the Highway 198 Specific Plan Land Use Map also designate a number of other parcels in the area of north Farmersville with specific land use designations, and the zoning needs to be changed to ensure that zoning and land use designations are consistent, as required by State law, and

WHEREAS, upon further review and analysis, it is also appropriate to amend the General Plan and Highway 198 Specific Plan land use designations of several affected parcels as shown on Map 1, and

WHEREAS, the City has prepared the text of a new Highway Commercial (C-H) zone and is in the process of adopting this zone, and

WHEREAS, the City has conducted a workshop on this issue to solicit input from affected properties and businesses and the Planning Commission, and

WHEREAS, the Planning Commission conducted a public hearing on April 15, 2009 and voted unanimously to recommend approval of the land use and zoning amendments, as well as adoption of the Highway Commercial zone, and

WHEREAS, affected property owners, and property owners within 300 feet of the proposed land use amendments and zone changes were notified of the City Council meeting and a public hearing notice was published ten (10) days prior to the City Council's meeting, and

WHEREAS, the Planning Department has prepared a staff report and environmental finding on the project, and

WHEREAS, the City Council held a public hearing on the land use amendment and zone changes and accepted testimony.

NOW, THEREFORE, BE IT RESOLVED that the City Council, after considering all the evidence presented, determined the following findings were relevant in evaluating these amendment requests.

1. The City has previously prepared Draft and Final Environmental Impact Reports for the 2002 Farmersville General Plan and a Mitigated Negative Declaration for the Highway 198 Specific Plan . A review of these documents shows that they adequately analyze potential impacts of the proposed land use and zoning amendments. The Draft and Final EIR and Mitigated Negative Declaration are hereby adopted for purposes of these land use and zone amendments.

2. The affected parcels are within Farmersville's ultimate sewer, water and storm drainage service areas.

3. The proposed amendments will not have an adverse impact on the health, safety or welfare of surrounding residents or on the community.

BE IT FURTHER RESOLVED that the City Council hereby approves General Plan Amendment 2009-01 and Highway 198 Specific Plan Amendment 2009-01, as shown on Map 1.

The foregoing resolution was adopted upon a motion of Council member Boyer, second by Council member Santana at a regular meeting of the Farmersville City Council on May 11, 2009, by the following roll call vote:

AYES:	4	Benavides, Hosier, Santana, Boyer
NOES:	0	
ABSTAIN:	0	
ABSENT:	1	Rowlett



Mayor, City of Farmersville



City Clerk, City of Farmersville

ORDINANCE NO. 448

AN ORDINANCE OF THE CITY OF FARMERSVILLE, COUNTY OF TULARE, STATE OF CALIFORNIA, AMENDING ORDINANCE NO. 319 AS AMENDED, OF THE CITY OF FARMERSVILLE, RELATING TO THE CLASSIFICATION OF THE ZONE OF PARTICULAR PARCELS OF REAL PROPERTY

The City Council of the City of Farmersville does ordain as follows:

SECTION 1. Sections 17.12.020 and 17.12.030 of the Municipal Code of the City of Farmersville, are amended by changing the Zoning Map to redesignate 13 parcels situated in the northern part of Farmersville, to various commercial and industrial zoning designations as shown on Map 1, and listed as follows:

<u>Assessor Parcel Number</u>	<u>Proposed Zoning</u>
111-190-002	C-H (Highway Commercial)
111-190-017	C-H (southerly 12.3 acres only)
111-190-028	C-H (Highway Commercial)
111-190-029	C-H (Highway Commercial)
111-190-030	C-H (Highway Commercial)
128-250-013	P/QP (Public/Quasi-Public)
128-250-016	C-H (Highway Commercial)
128-250-019	C-H (Highway Commercial)
128-250-020	C-H (Highway Commercial)
128-250-021	C-H (Highway Commercial)
128-260-011	I (Industrial)
128-260-012	C-G (General Commercial)
128-260-013	C-G (General Commercial)

The parcels are generally located on both the west and east sides of Farmersville Boulevard, south of State Highway 198, as shown on Map 1.

SECTION 2. Severability. If any part of this Ordinance is held to be invalid for any reason, such decision shall not affect the validity of the remaining portions of this Ordinance, and the City Council hereby declares that it would have passed the remainder of this Ordinance, as if such invalid portion thereof had been deleted.

SECTION 3. This ordinance shall take effect thirty (30) days after its passage.

SECTION 4. The City Clerk is hereby ordered and directed to certify the passage of this Ordinance and to cause the same to be published once in a newspaper of general circulation, published in the County of Tulare.

I hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Farmersville held on the 11th day of May, 2009, and passed and adopted at a Regular meeting of the City Council held on the ____ day of May, 2009, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Leonel Benevidez, Mayor
City of Farmersville

Rene Miller, City Manager
City of Farmersville

2008-11

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FARMERSVILLE IN OPPOSITION TO THE PROPOSED CROSS VALLEY LOOP ROUTE 1 THROUGH FARMERSVILLE CITY LIMITS

WHEREAS, it is stated that Tulare County faces shortages in supply of electricity in the future; and

WHEREAS, Southern California Edison Company (SCE) supplies electricity to the Tulare County area; and

WHEREAS, SCE is proposing to the California Public Utilities Commission a proposed plan and two alternate routes to supply the additional electricity to Tulare County Grid; and

WHEREAS, the proposed Route 1 will slice through the northern portion of our City in an area that has been reserved for economic development and includes a portion of the City's Redevelopment Area thereby eliminating the productive use of at least a 100 foot strip of land through this area of the City not to mention the many other land owners along this route who farm and have homes that will be adversely affected by this project; and

WHEREAS, Alternate Route #3 would utilize much more SCE existing right-of-way and cross over grazing land which would affect only 7 land owners; and

WHEREAS, the City (which qualifies as an economically disadvantaged community) desperately needs the tax revenue to be generated by not only the 100 foot strip, but neighboring properties as well that could provide jobs and services to the residents of the community; and

WHEREAS, the proposed project Route 1 would be detrimental to the property owners developing the sites who would likely now be deterred from locating commercial and industrial development in this area designated for this needed development, and

WHEREAS, the siting of power transmission lines along the proposed Route 1 will cut across our City's entrance from State Highway 198 along Farmersville Boulevard marring the view along this proposed scenic entrance to our community forever.

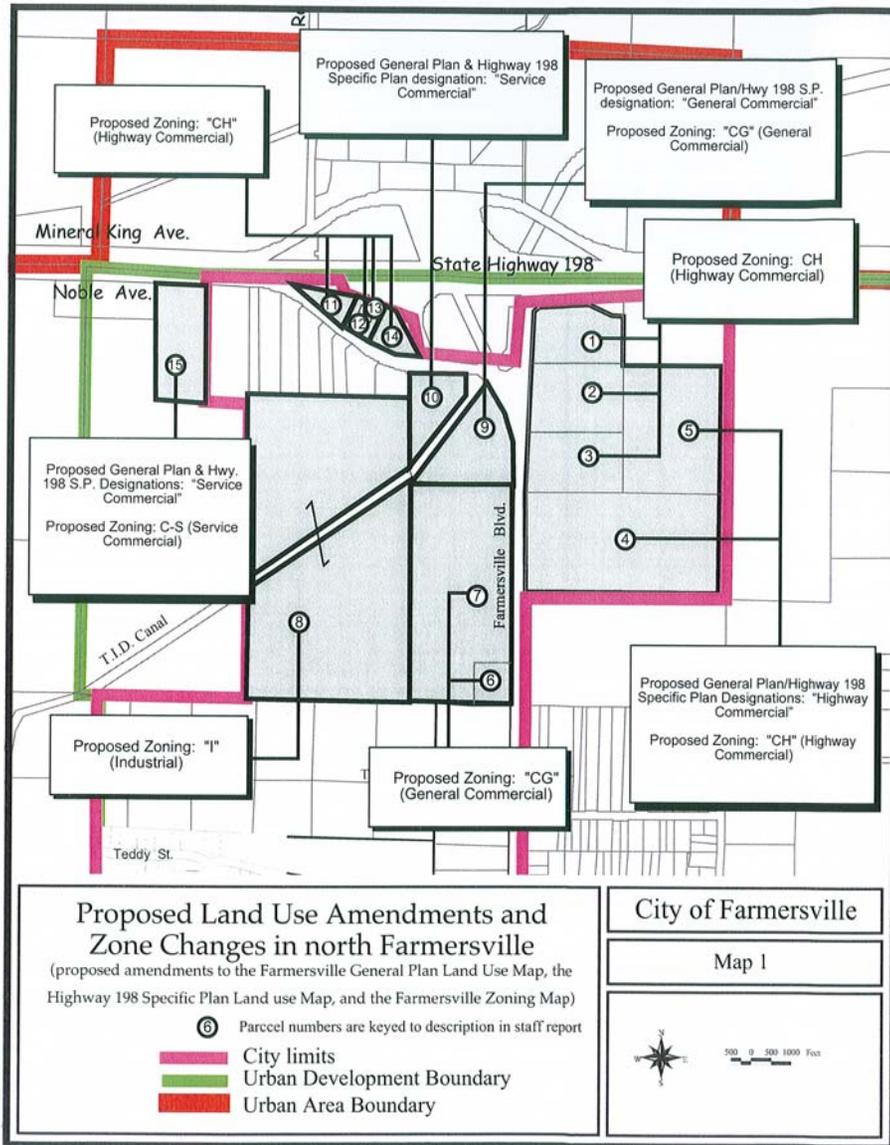
NOW, THEREFORE, BE IT RESOLVED BY THE City Council of the City of Farmersville that we hereby oppose SCE's Proposed Route 1 and support SCE's Route 3.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Farmersville held on April 14, 2008, by the following vote:

- AYES: Santana, Boyer, Hosier, Benavides
- NOES: None
- ABSENT: Rowlett
- ABSTAIN: None

ATTEST: 
Rosemary Silva, CITY CLERK

APPROVED: 
Leonel Benavides, MAYOR



2009-08

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FARMERSVILLE IN SUPPORT OF SOUTHERN CALIFORNIA EDISON ALTERNATIVE ROUTE 3

WHEREAS, Tulare County faces shortages in supply of electricity in the future; and

WHEREAS, Southern California Edison Company (SCE) supplies electricity to the Tulare County area; and

WHEREAS, SCE proposed to the California Public Utilities Commission a plan and two alternate routes to supply the additional electricity to Tulare County Grid; and the California Public Utilities Commission is recommending variations of the proposed routes

WHEREAS, the PUC suggested routes will still affect valuable farm land and inflict hardship on the farmers as well as reduce jobs to residents of Farmersville, and

WHEREAS, Alternate Route #3 would use existing right of way and cross over grazing land which would affect only 7 land owners; and

NOW, THEREFORE, BE IT RESOLVED BY THE City Council of the City of Farmersville that we hereby continue to support the development of SCE's Route 3.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Farmersville held on February 23, 2009, by the following vote:

AYES: BENAVIDES, BOYER, HOSIER, ROWLETT, SANTANA
NOES: NONE
ABSENT: NONE
ABSTAIN: NONE

APPROVED: [Signature] Leonel Benavides, Mayor

ATTEST: [Signature] Rebe Miller, Acting City Clerk

Part I: General Plan

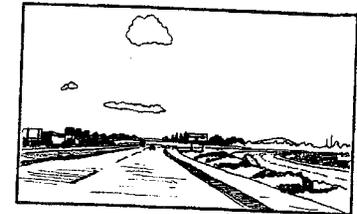
Farmersville General Plan • 2000 - 2025 Chapter 2: Land Use Element

State Highway 198

Highway 198 is Farmersville's "front door" to the world. Daily, thousands of vehicles pass by Farmersville on the highway. A number of these vehicles carry international visitors bound for the scenic wonders of Sequoia National Park.

As the city's front door, the City should try to create as attractive an image as possible. This goal is not only for aesthetic reasons but is also economic. Travelers do not want to stop at a location they perceive as unattractive or unsafe.

Likewise, business owners will not choose to locate their firms in a community that does not appeal to them. Establishing an attractive highway presence can help Farmersville bolster its economic development. The City can also take the opportunity to attract retail commercial businesses (such as an automobile dealership) that prefer a high visibility location along the highway. The sales tax benefits for the City could be significant.



View looking east on Highway 198

Goals, Objectives, Action Plans

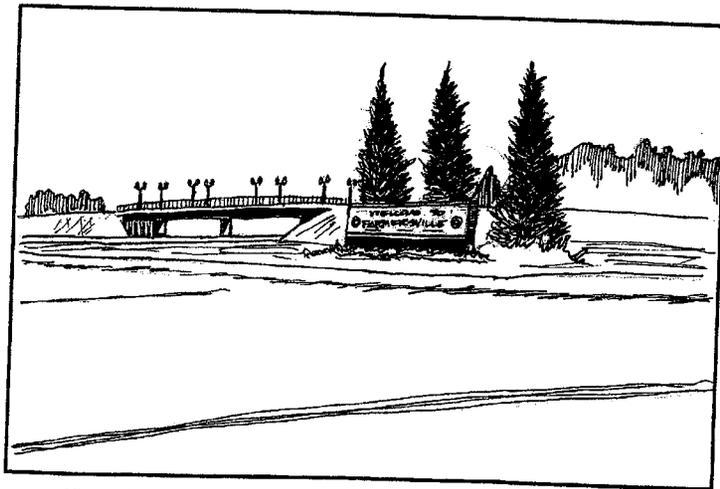
- 1. The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198.
1. The Land Use Map designates a combination of Highway Commercial and Industrial land uses along the highway.
2. Require attractive landscape and building designs that will reflect positively on Farmersville.
a. Establish a special "Highway 198" overlay zone that incorporates special building, landscaping, screening and signage requirements.
3. Erect "Welcome to Farmersville" signs at the interchange of Highway 198 and Farmersville Boulevard.
a. The City, Chamber of Commerce and to-be-formed Beautification Committee should

Highway 198 is Farmersville's "front door" to the world. First impressions can "make or break" a community's chances of attracting new development and revenue. . .

Part I: General Plan

Farmersville General Plan • 2000 - 2025
Chapter 2: Land Use Element

- work together to design, raise funds and establish community identification signs.
- 4. Work with Caltrans to establish landscaping within the freeway right-of-way.
- 5. Work with Caltrans to transform the Farmersville Boulevard overpass bridge into an attractive design element. Antique light poles, black wrought-iron railing and banners could be considered.
 - a. The City Manager should open a line of contact with Caltrans to pursue completion of these objectives.



View of Highway 198/Farmersville Boulevard interchange shows "Welcome to Farmersville" sign, landscaping, and decorative light fixtures on the bridge.

RESOLUTION 2009-56

**BEFORE THE CITY COUNCIL
CITY OF FARMERSVILLE
COUNTY OF TULARE, STATE OF CALIFORNIA.**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FARMERSVILLE APPROVING AMENDMENTS TO THE GENERAL PLAN LAND USE MAP AND THE HIGHWAY 198 SPECIFIC PLAN LAND USE MAP TO IMPLEMENT OBJECTIVES AND POLICIES OF THE 2002 FARMERSVILLE GENERAL PLAN AND HIGHWAY 198 SPECIFIC PLAN, AND TO ENSURE CONSISTENCY BETWEEN LAND USE AND ZONING DESIGNATIONS.

WHEREAS, the 2002 Farmersville General Plan includes a variety of policies encouraging the City to take steps to strengthen Farmersville's commercial and industrial areas, and

WHEREAS, one of the General Plan's recommendations is for the City to create a highway commercial zone district, with special standards relating to permitted uses and property development, including landscaping, screening and quality design, and

WHEREAS, land uses permitted in the highway commercial zone are those geared to the traveling public, such as restaurants, service stations, lodging, retail commercial and related complementary uses, and

WHEREAS, both the General Plan Proposed Land Use map and the Highway 198 Specific Plan Land Use Map also designate a number of other parcels in the area of north Farmersville with specific land use designations, and the zoning needs to be changed to ensure that zoning and land use designations are consistent, as required by State law, and

WHEREAS, upon further review and analysis, it is also appropriate to amend the General Plan and Highway 198 Specific Plan land use designations of several affected parcels as shown on Map 1, and

WHEREAS, the City has prepared the text of a new Highway Commercial (C-H) zone and is in the process of adopting this zone, and

WHEREAS, the City has conducted a workshop on this issue to solicit input from affected properties and businesses and the Planning Commission, and

WHEREAS, the Planning Commission conducted a public hearing on April 15, 2009 and voted unanimously to recommend approval of the land use and zoning amendments, as well as adoption of the Highway Commercial zone, and

WHEREAS, affected property owners, and property owners within 300 feet of the proposed land use amendments and zone changes were notified of the City Council meeting and a public hearing notice was published ten (10) days prior to the City Council's meeting, and

WHEREAS, the Planning Department has prepared a staff report and environmental finding on the project, and

WHEREAS, the City Council held a public hearing on the land use amendment and zone changes and accepted testimony.

NOW, THEREFORE, BE IT RESOLVED that the City Council, after considering all the evidence presented, determined the following findings were relevant in evaluating these amendment requests.

1. The City has previously prepared Draft and Final Environmental Impact Reports for the 2002 Farmersville General Plan and a Mitigated Negative Declaration for the Highway 198 Specific Plan . A review of these documents shows that they adequately analyze potential impacts of the proposed land use and zoning amendments. The Draft and Final EIR and Mitigated Negative Declaration are hereby adopted for purposes of these land use and zone amendments.

2. The affected parcels are within Farmersville's ultimate sewer, water and storm drainage service areas.

3. The proposed amendments will not have an adverse impact on the health, safety or welfare of surrounding residents or on the community.

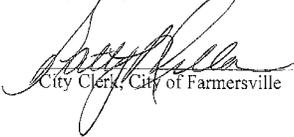
BE IT FURTHER RESOLVED that the City Council hereby approves General Plan Amendment 2009-01 and Highway 198 Specific Plan Amendment 2009-01, as shown on Map 1.

The foregoing resolution was adopted upon a motion of Council member Boyer, second by Council member Santana at a regular meeting of the Farmersville City Council on May 11, 2009, by the following roll call vote:

AYES:	4	Benavides, Hosier, Santana, Boyer
NOES:	0	
ABSTAIN:	0	
ABSENT:	1	Rowlett



Mayor, City of Farmersville



City Clerk, City of Farmersville

ORDINANCE NO. 448

AN ORDINANCE OF THE CITY OF FARMERSVILLE, COUNTY OF TULARE, STATE OF CALIFORNIA, AMENDING ORDINANCE NO. 319 AS AMENDED, OF THE CITY OF FARMERSVILLE, RELATING TO THE CLASSIFICATION OF THE ZONE OF PARTICULAR PARCELS OF REAL PROPERTY

The City Council of the City of Farmersville does ordain as follows:

SECTION 1. Sections 17.12.020 and 17.12.030 of the Municipal Code of the City of Farmersville, are amended by changing the Zoning Map to redesignate 13 parcels situated in the northern part of Farmersville, to various commercial and industrial zoning designations as shown on Map 1, and listed as follows:

<u>Assessor Parcel Number</u>	<u>Proposed Zoning</u>
111-190-002	C-H (Highway Commercial)
111-190-017	C-H (southerly 12.3 acres only)
111-190-028	C-H (Highway Commercial)
111-190-029	C-H (Highway Commercial)
111-190-030	C-H (Highway Commercial)
128-250-013	P/QP (Public/Quasi-Public)
128-250-016	C-H (Highway Commercial)
128-250-019	C-H (Highway Commercial)
128-250-020	C-H (Highway Commercial)
128-250-021	C-H (Highway Commercial)
128-260-011	I (Industrial)
128-260-012	C-G (General Commercial)
128-260-013	C-G (General Commercial)

The parcels are generally located on both the west and east sides of Farmersville Boulevard, south of State Highway 198, as shown on Map 1.

SECTION 2. Severability. If any part of this Ordinance is held to be invalid for any reason, such decision shall not affect the validity of the remaining portions of this Ordinance, and the City Council hereby declares that it would have passed the remainder of this Ordinance, as if such invalid portion thereof had been deleted.

SECTION 3. This ordinance shall take effect thirty (30) days after its passage.

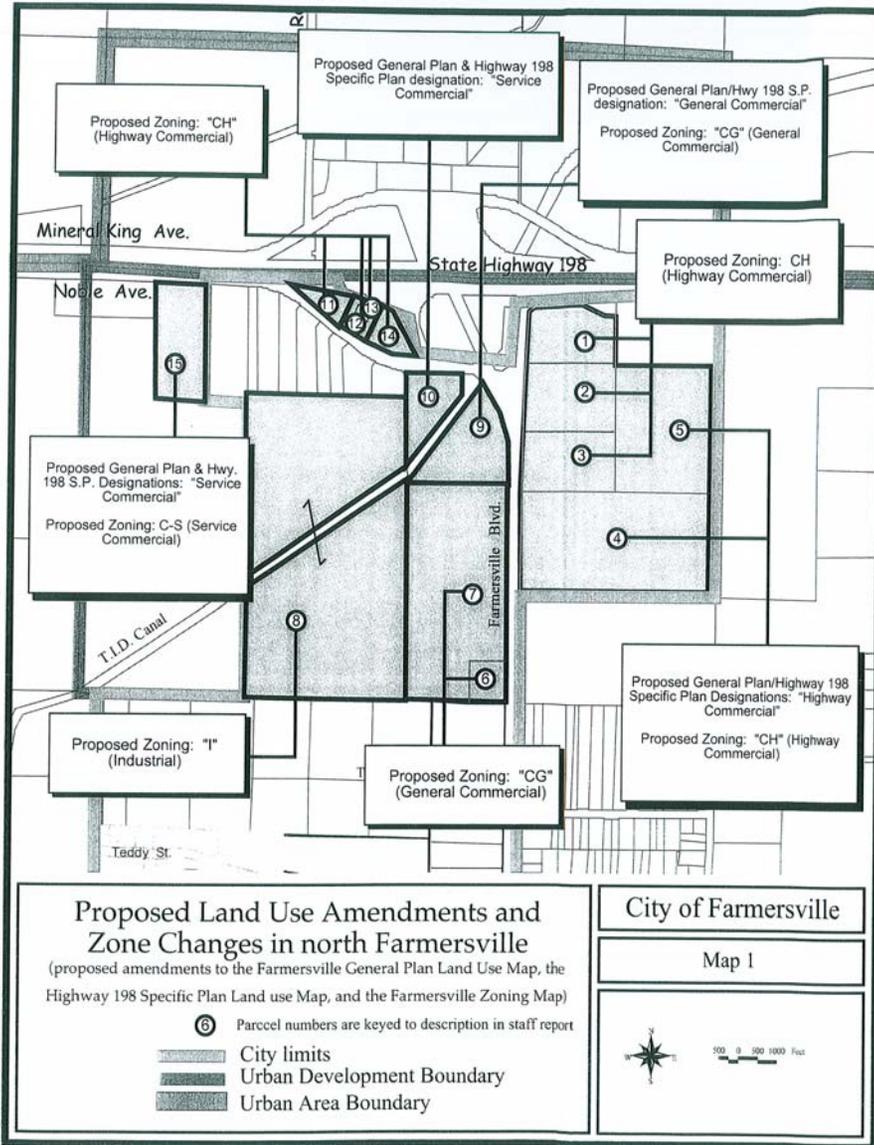
SECTION 4. The City Clerk is hereby ordered and directed to certify the passage of this Ordinance and to cause the same to be published once in a newspaper of general circulation, published in the County of Tulare.

I hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Farmersville held on the 11th day of May, 2009, and passed and adopted at a Regular meeting of the City Council held on the ____ day of May, 2009, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Leonel Benevidez, Mayor
City of Farmersville

Rene Miller, City Manager
City of Farmersville



1 MICHAEL L. FARLEY, SBN 76368
 2 MOSES DIAZ, SBN 224572
 3 FARLEY LAW FIRM
 4 108 West Center Avenue
 5 Visalia, California 93291
 6 Telephone: 559-738-5975
 7 Facsimile: 559-732-2305

8 Attorneys for CITY OF FARMERSVILLE

9 BEFORE THE PUBLIC UTILITIES COMMISSION
 10 OF THE STATE OF CALIFORNIA

11 In the Matter of the Application of SOUTHERN
 12 CALIFORNIA EDISON COMPANY (U 338-E)
 13 for a Certificate of Public Convenience and
 14 Necessity for the San Joaquin Cross Valley Loop
 15 Transmission Project.

16 Application 08-05-039
 17 (Filed May 30, 2008)

18 **PREPARED TESTIMONY OF THE CITY MANAGER**
 19 **OF THE CITY OF FARMERSVILLE**

20 I, René Miller, hereby declare as follows:

21 I am the City Manager of the City of Farmersville ("City") and have served in that
 22 capacity since 2004. Prior to that, I worked as the City's Finance Director. A true and correct
 23 copy of my qualifications is attached hereto as **EXHIBIT A**, and is fully incorporated herein.

24 The statements in this document are true of my knowledge, except as to matters which are
 25 herein stated on information and belief, and as to those matters, I believe them to be true.

26 The City appreciates the opportunity to provide testimony in the San Joaquin Valley Loop
 27 Project proposed by Southern California Edison (SCE). The City understands SCE's contention
 28 that the project is necessary to provide safe and reliable electrical service and increase
 transmission capacity within the service area. The City supports the project's overall objectives
 the City does not support Alternatives 1, 2 and 4.

The City continues to support PROTECT AGRICULTURE COMMUNITIES
 ENVIRONMENT (P.A.C.E.) in recommending Alternative 3 with mitigation of the vernal pools

PREPARED TESTIMONY OF THE CITY MANAGER OF THE CITY OF FARMERSVILLE.

1 at the Stone Coral Ecological Reserve. The City believes Alternative 3 is the superior option
 2 based upon the fact that it would result in the least impacts on agriculture and has no negative
 3 impact on the City of Farmersville's economic and cultural interests.

4 The City is supportive of SCE's expansion of electrical services to the San Joaquin Cross
 5 Valley Loop. However, the City is not supportive of SCE's Proposed Project Alternative 1,
 6 which would impede and virtually obstruct the proposed and future industrial and commercial
 7 development slated for the Farmersville Industrial/Commercial Park projects located at Highway
 8 198 and Farmersville Blvd., (approximately 111 +/- acres). Without this Industrial/Commercial
 9 Park the City would stand to lose over \$500,000 annually in sales tax revenues, over \$186,500
 10 annually in property tax revenues and over 925 new jobs, all of which are critical to the
 11 operations and revitalization of Farmersville. The City has a population of approximately
 12 10,500, is 72% Hispanic and has a median household income of \$27,682.

13 **INVESTMENT IMPACT**

14 The commercial acreage will consist of a regional shopping center with the potential of
 15 providing new property tax revenue for local government, over \$500,000 in new sales tax and
 16 over 425 new jobs created initially. The City is currently negotiating with a company to develop
 17 this site. In addition, initially approximately \$140,000.00 in new property tax revenues will be
 18 generated.

19 After development, the Industrial Park is projected to have an additional direct impact of
 20 approximately 500 new higher-skilled and higher wage jobs and will result in approximately
 21 \$42.25 million in private investments. Approximately \$46,500 in new and additional property
 22 tax revenues would be generated and an additional undetermined amount of revenues from sales
 23 tax from expenditures by companies who relocated into the proposed Industrial Park from
 24 locations other than Farmersville.

25 The present downturn in the economy has reduced the City's property tax revenue by 11%
 26 for the 2009/10 fiscal year and an anticipated 25% for the 2010/11 fiscal year. The City
 27 presently has no major retail outlet to generate sales taxes. The City's sales tax allocation was
 28 slightly more than \$300,000 for the 2007/08 fiscal year and less thereafter. The State Board of

1 Equalization is anticipating a reduction of 25% of Sales Taxes for the 2008/09 fiscal year. The
 2 cumulative effect of these reductions will amount to the laying off of 3 or 4 police officers and
 3 additional reductions in services. This constitutes a reduction of 25% of the City's sworn police
 4 officers.

5 The City is forced to obtain grants to pay for the animal control officer and the code
 6 enforcement officer. The City has even used grant money to pay for a police officer. Without
 7 the grants the City would have to forego these services. A regional shopping center and business
 8 park would generate additional tax revenues that would fund these critical services. It would
 9 further allow the City to manage recreation activities that improve the health and well being of
 10 the entire community.

11 Presently, the City can only budget \$7,000 annually to fund recreational activities. The
 12 City has 19 acres of developed park land and it costs \$247,000 to properly maintain the parks.
 13 However, the City can only afford to budget \$141,000. The City has obtained property to build a
 14 Sports Park with sufficient fields to allow City youth sports, but the cost to maintain the Sports
 15 Park alone projected to be \$320,000. The City cannot possibly consider even grants to build the
 16 Sports Park until the City can afford to fund the maintenance of the park.

17 The residents of the Community of Farmersville value being productive individuals.
 18 Presently, the economy has left our community with a 17.8% unemployment rate. Many of our
 19 residents need training and more education. New jobs that would be created with the anticipated
 20 regional shopping center and business/industrial park would give the residents an opportunity to
 21 be those productive residents.

22 The Proposed Project would divide the City by the creation of a 100-foot wide physical
 23 swath of undeveloped land and visual obstruction through the City of Farmersville existing City
 24 Limits and Urban Development Area. It would also deprive the community of critical frontage
 25 along Highway 198 which would be devastating to commercial projects already in the planning
 26 stages. The project would thwart the City's efforts to achieve a well-planned and self-sufficient
 27 community that supports efficient development and respects the aesthetic values of its citizens,
 28 as expressed in the Farmersville General Plan Land Use, Circulation, Conservation/Open Space,

1 Parks and Recreation Elements adopted November, 2002 and the City of Farmersville Highway
 2 198 Corridor Specific Plan adopted in 2003.

3 **HISTORY**

4 The City of Farmersville is located in Tulare County in the heart of central California and
 5 is at the base of the Sierra Nevada mountain range, which is home to Sequoia National Park and
 6 Forest. Farmersville is the third oldest community in Tulare County, dating back to the early
 7 1850's and has a population of more than 10,500 residents of which 72% are Hispanic.

8 Less than 3,900 people are employed within Farmersville, however, it continues to have
 9 one of the highest unemployment rates among cities within Tulare County at 17.8%.

10 Farmerville has diligently pursued the development of an industrial park located at the
 11 northeast section of town near Highway 198. The industrial part will provide 60+/- acres of
 12 developable property for medium-to-large size businesses. The parcels will vary in size from 1
 13 acre to 5 acres with some conducive to service commercial businesses as well as industrial.

14 Tulare County is one of the most economically distressed areas in California. In 1998,
 15 the State created and designated a Targeted Tax Area within Tulare County (the only one in the
 16 State) to provide tax incentives to the entire region to alleviate the high rate of poverty and
 17 unemployment. While the region has experienced some growth in employment and income
 18 levels within the past few years, it has also been hit hard economically in the past twelve months.
 19 In early 2007, the region was plagued by one of the most devastating freezes in history resulting
 20 in the loss of approximately 75% of the citrus crop, resulting in major job losses. Farmersville's
 21 population is predominantly employed in the agriculture industry. Additionally, the near-total
 22 halt in construction activity has also resulted in job losses. The unemployment rate for the entire
 23 county is 14.3% and 17.8% within the City of Farmerville, according to State of California
 24 Employment Development Department.

25 The most recent poverty data (2005) shows 23.2% of the Farmersville population are in
 26 poverty and the per capita income is \$12,000 less than the nationwide average (STATS Indiana
 27 Business Research Center). The City of Farmersville, while having a centralized location within
 28

1 the County, has struggled to foster economic development due to its small size, lack of revenue
 2 sources that other cities within the region have and its low income status.

3 **LAND USE, PLANNING AND POLICIES**

4 The City has been strategically planning on the development of the Highway 198 Corridor
 5 since 2003, when it adopted a specific plan for the area and has been targeting investments in
 6 major infrastructure improvements to be able to serve the impending industrial park. Businesses
 7 in the industrial park as well a training center will improve the job opportunities for the City's
 8 residents.

9 The Proposed Project is entirely inconsistent with Farmersville's Land Use, Planning and
 10 Policies. Farmersville's planning policy documents are designed to promote development that
 11 follows Smart Growth principles with efficient use of land and that fosters an aesthetic quality
 12 for the community that will promote community pride and create a positive environment for
 13 economic prosperity.

14 The Proposed Project will displace 15+ acres of prime commercial and industrial land,
 15 requiring expansion of development boundaries, likely to be on Prime Agricultural land. The
 16 visual impact of the Proposed Project will deter the ability to attract consumers and create a
 17 positively aesthetic entrance to Farmersville from Highway 198.

18 Specifically, the following is a list of Farmersville's official goals and policies that are in
 19 conflict with the Proposed Project:

20 **Farmersville General Plan:**

21 *Goals, Objectives and Policies*

- 22 • Create a community that portrays an image that is progressive and energetic
- 23 • Promote commercial development that is attractive
- 24 • Protect and preserve natural resources, such as farmland, air and water quality and
 25 native vegetation while facilitating growth of the community
- 26 • Foster an attractive, clean and well-maintained community
- 27 • Ensure that adequate land exists for future commercial and industrial development
- 28

- The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198

The City of Farmersville Highway 198 Corridor Specific Plan provides for two storm drainage park/ponds within the planning area. The plan states that "All ponding basins shall be multi-use whenever possible..." The Proposed Project bisects the park/pond located north of Avenue 291, between Farmersville Blvd. and Road 168, with the 100 foot wide transmission line right-of-way. This will potentially cause a loss of recreational opportunity.

Currently there are 45 acres of property planted in walnut trees and 19 acres are fallow in the Industrial Park. There is a wide irrigation canal that cuts diagonally through the property. This canal must be left open and a bridge is necessary to allow traffic to cross between the north and south areas of the property. There is a water retention pond on property adjacent to the industrial park. The City of Farmersville developed a specific plan for this area that entitled the general configuration and intensity of development within the area. The City's general plan provided environmental analysis for the various land uses and the specific plan had separate environmental review.

AESTHETICS

The Proposed Project would traverse through Farmersville's existing City Limits and Urban Area Boundary to the complete east-west extent. Negative visual of the views would be experienced by the nearby residents and residents of Farmersville as they work, play, go to school and go about their daily activities in their homes and throughout the community would be apparent.

These negative views of the poles and lines would be apparent from the major residential subdivisions in proximity of the Proposed Project, specifically those located on the west side of Farmersville, north of Walnut Avenue as well as Farmersville High School. The Proposed Project would also cause a substantial alteration to the viewshed to the community as a whole.

The visibility of the Proposed Project from points of high concentrations of people in the community is apparent. The new proposed towers and lines are vastly more visual than the existing wooden poles along the left side of Farmersville Blvd. The Proposed Project consisting

of a series of structure 120 to 160 feet tall connected with transmission lines would create a visual band in the skyline across the entire east-west extent of the community. The existing wood utility poles along roadways would not obscure the visual impact of the Propose Project.

Liberty Park, located on the north side of Teddy Ave., west of Farmersville Blvd is located less than 2000 feet from the proposed project and clearly there would be unobstructed views of the Proposed Project to users of the park facility.

The Proposed Project will become the visual backdrop of the community. The predominant visual feature entering the city from Highway 198 will be the transmission lines. The predominant visual feature for those living/working south of the Proposed Project will be the transmission lines which will obscure the scenic vista of the Sierra Mountains.

AGRICULTURE RESOURCES

The Proposed Project would displace 15+ acres of planned urban development, as the transmission lines, as proposed, would bisect land designated for Industrial and General Commercial land use. This estimate of displace land does not take into consideration the land designated for urban development that would be lost due to inefficiencies of land development that would occur associated with impacts of 100 feet of transmission line right-of-way cutting through parcels possibly making properties difficult to develop and inefficiencies of providing utilities and infrastructure and local/collector road systems in order to avoid requirements/restrictions of intrusion into the right-of-way. Nor does this estimate address the increased pressures to expand the Urban Development Boundary and City Limits to provide land eligible for development more distant to the location of the lines, as it is likely preferred development sites will not be those directly adjacent to the power lines.

Land that is designated for urban use that would be displaced by the Proposed Project would need to be replaced elsewhere. Soils in and around Farmersville are considered "Prime Farmland". Expansion of development boundaries to accommodate the Urban Land lost due to impacts associated with the Proposed Project will lead to the permanent reduction of agricultural lands.

1 **RECREATION**

2 The City of Farmersville Highway 198 Corridor Specific Plan provides for two storm
3 drainage park/ponds within the planning area. The plan states that "All ponding basins shall be
4 multi-use whenever possible..." The Proposed Project bisects the park/pond located north of
5 Avenue 291, between Farmersville Boulevard and Road 168, with the 100-foot wide
6 transmission line right-of-way. This will cause a loss of recreational opportunity.

7 **UTILITIES AND SERVICES SYSTEMS**

8 The City of Farmersville Highway 198 Corridor Specific Plan identifies plans for Sanitary
9 Sewer, Water and Storm Drainage.

10 With specific regard to the Highway 198 Corridor Specific Plan Storm Drainage plan.
11 The Proposed Project appears to bisect a park/pond basin. The park/pond facility is intended to
12 serve as terminal retention or detention facilities prior to storm water being pumped into the
13 Tulare Irrigation District's system after peak flows in the system subside or are retained and
14 infiltrated. Therefore, there will be standing water in the facilities from time to time.

15
16 I declare under penalty of perjury under the laws of the state of California that the
17 foregoing is true and correct.

18 Executed in Farmersville, California on this 17th, day of July 2009.

19 Dated: July 17, 2009

Rene Miller

20
21 RENE MILLER (cparene@sbcglobal.net)
22 CITY OF FARMERSVILLE
23 909 West Visalia Road
24 Farmersville, California 93223

As to form:

Michael L. Farley

25
26 MICHAEL L. FARLEY (kfike@farleylawfirm.com)
27 MOSES DIAZ (mdiaz@farleylawfirm.com)
28 FARLEY LAW FIRM
108 West Center Avenue
Visalia, California 93291

559-738-5975
559-732-2305 (fax)
Attorneys for CITY OF FARMERSVILLE.

MD/07/172009 - Farmersville - Prepared Testimony-1.doc

Cathey René Miller
City Manager
City of Farmersville, California

EDUCATION:

Tokay High School, Lodi California – 9/1971 to 6/1975 –Graduated
Stanislaus State University, Turlock, California – 9/1975 to 12/1979
Bachelor of Arts Degree Concentration Accounting

LICENSES:

California Certified Public Accountant – 1983 – Inactive Status as of March, 2005,
License Number #38125e

WORK EXPERIENCE:

City of Farmersville – City manager – 11/2004 to Present
Managing activities in the City and 36 employees.

City of Farmersville – Finance Director – 9/2003 to 11/2004
Responsible for \$8 million dollar budget, managed accounting department, and prepared financial statements for audit.

M. Green & Company LLC – Manager and staff CPA – 2/1992 to 9/2003
Managed Audits and audit teams, prepared reports, prepared various tax returns.

Donn Doss, Certified Public Accountant – Staff CPA – 2/1983 to 2/1992
Performed audits, prepared tax returns, and financial consulting with clients

College of Sequoias – Adjunct Faculty - 9/1991 to 5/1992
Taught Financial accounting and Managerial Accounting.

Riesenbeck Crane & Rich, Certified Public Accountants – Staff Accountant – 12/1979 to 2/1982.
Worked on audits, prepared monthly bookkeeping and financial statements for clients and prepared various tax returns.

Previous experience upon request.

VOLUNTEER ACTIVITIES:

Soroptomist Club – Hanford California – 1989 to 1992

PTA – Visalia California
Local School Unit Treasurer 1993 to 1996
District Treasurer 1994 to 1998
District Auditor 1998 to 2003

Grace Community Church – teacher – 1987 to present.

Farmersville Kiwanis – Secretary – 2007 to present

EXHIBIT A

1 MICHAEL L. FARLEY, SBN 76368
2 MOSES DIAZ, SBN 224572
3 **FARLEY LAW FIRM**
4 108 West Center Avenue
5 Visalia, California 93291
6 Telephone: 559-738-5975
7 Facsimile: 559-732-2305

8 Attorneys for CITY OF FARMERSVILLE

9 BEFORE THE PUBLIC UTILITIES COMMISSION
10 OF THE STATE OF CALIFORNIA

11 In the Matter of the Application of SOUTHERN
12 CALIFORNIA EDISON COMPANY (U 338-E)
13 for a Certificate of Public Convenience and
14 Necessity for the San Joaquin Cross Valley Loop
15 Transmission Project.

Application 08-05-039
(Filed May 30, 2008)

16 **CERTIFICATE OF SERVICE**

17 [Rule 1.9(d), CPUC Rules of Practice and Procedure/]

18 I, the undersigned, declare and state as follows:

19 I am employed in Tulare County and over eighteen (18) years of age. I am not a party to
20 the within entitled action. My business address is 108 West Center Avenue, Visalia, California
21 93291. On the date listed below, I caused the following document(s), all of which were produced
22 on recycled paper, to be served in the manner hereafter indicated:

- 23 1. **PREPARED TESTIMONY OF THE CITY MANAGER OF THE CITY OF FARMERSVILLE.**
- 24 2. **CERTIFICATE OF SERVICE.**

25 **BY MAIL:** For each party with no e-mail address is listed, I placed the original
26 and/or a true copy(ies) thereof enclosed in sealed envelope. I deposited such
27 envelope in the U.S. mail at the City of Visalia, State of California, with first-class
28 postage thereon fully prepaid.

BY FACSIMILE TRANSMISSION: I transmitted via facsimile a true copy thereof to
the addressee at facsimile number:

BY ELECTRONIC MAIL (EMAIL): At 4:30 A.M.(P.M.) on the date listed
below, I transmitted via the Internet, from kfike@farleylawfirm.com without any
report of error, a true copy thereof to the following e-mail address(es):

1 **BY OVERNIGHT DELIVERY:** I deposited the original and/or a true copy(ies)
2 thereof into envelope(s) or package(s) designated by the overnight delivery carrier with
3 delivery fees fully prepaid or provided and:

4 deposited such envelope(s) or package(s) in a facility regularly maintained
5 by the overnight delivery carrier; or

6 delivered such envelope(s) or package(s) to an authorized courier or driver
7 authorized by the overnight delivery carrier to receive documents

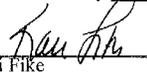
8 **PERSONAL SERVICE:** By causing delivery by hand on July ____, 2009 to the
9 following person at the address shown:

10 **SERVICE WAS DIRECTED TO:**

11 **See attached Service List.**

12 I declare, under penalty of perjury under the laws of the State of California, that the
13 foregoing is true and correct.

14 Executed on July 17, 2009, at Visalia, California.

15 
16 Kari Fike

17 MD/Farmersville - Certificate of Service.doc

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

***** PARTIES *****

Karen Mills
 CALIFORNIA FARM BUREAU FEDERATION
 2300 RIVER PLAZA DRIVE
 SACRAMENTO CA 95833
 (916) 561-5655
 kmills@cfbf.com
 For: California Farm Bureau Federation

Rene Miller
 City Manager
 CITY OF FARMERSVILLE
 909 WEST VISALIA ROAD
 FARMERSVILLE CA 93223
 (559) 747-0458
 rparene@sbcglobal.net
 For: City of Farmersville

Jesus Gamboa
 Mayor
 CITY OF VISALIA
 425 E. OAK, SUITE 301
 VISALIA CA 93291
 (559) 713-9317
 jgamboa@ci.visalia.ca.us
 For: City of Visalia

Ken Fitzgerald
 SUSAN FITZGERALD
 3330 W. MINERAL KING AVE, SUITE H
 VISALIA CA 93291
 (559) 733-3733
 For: Ken & Susan Fitzgerald

Mary A. Gorden
 PO BOX 44066
 LEMONCOVE CA 93244
 (559) 597-2373
 magorden@msn.com
 For: MARY A. GORDEN

Lon W. House Ph. D.
 4901 FLYING C RD.
 CAMERON PARK CA 95682
 (530) 676-8956
 lwhouse@imnercie.com
 For: Protect Agriculture Communities Environment (PACE)

John O. Kirkpatrick
 SHIRLEY B. KIRKPATRICK
 23114 CARSON AVENUE
 EXETER CA 93221-9744
 (559) 592-3422
 jkirkpatrick@onemain.com
 For: John O. Kirkpatrick, Shirley B. Kirkpatrick

Barbrae Lundberg
 23002 CLOSE AVE
 EXETER CA 93221
 (559) 967-8863
 For: Barbrae Lundberg

George McEwen
 22114 BOSTON AVE.
 EXETER CA 93221
 (559) 592-3387
 george@mcEwen.com
 For: George McEwen

Gayle Mosby
 3330 W. MINERAL KING AVE, SUITE H
 VISALIA CA 93291
 (559) 733-3733
 For: Gayle Mosby

William F. Pensar
 PO BOX 44001
 LEMON COVE CA 93244-0001
 (559) 597-2504
 pensar3@netzero.com
 For: William F. Pensar

Eric Quek
 Homeowner
 30905 ROAD 216
 EXETER CA 93221
 (559) 260-0460
 equek@asianchurohofehrist.org
 For: Eric Quek

D. Zachary Smith
 RUDDELL COCHRAN STANTON SMITH BIXLER
 1102 N. CHINOWTH
 VISALIA CA 93291
 (559) 733-5770
 zsmith@visalialaw.com
 For: Kaweah Delta Water Conservation District

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

***** INFORMATION ONLY *****

Jennifer Hasbrouck
 Attorney At Law
 SOUTHERN CALIFORNIA EDISON COMPANY
 2244 WALNUT GROVE AVENUE PO BOX 800
 ROSEMEAD CA 91770
 (626) 302-1040
 jennifer.hasbrouck@sec.com
 For: Southern California Edison Company

Patricia L. Stever
 Executive Director
 TULARE COUNTY FARM BUREAU
 PO BOX 748
 VISALIA CA 93279
 (559) 732-8301
 pstever@tulcofb.org
 For: TULARE COUNTY FARM BUREAU

Philip Pescosolido
 VALLEY VIEW RANCH/SIERRA VIEW RANCH
 POB 1108
 150 WEST PINE STREET
 EXETER CA 93221
 (559) 594-5369
 exctrade@aol.com
 For: Valley View Ranch/Sierra View Ranch

***** STATE EMPLOYEE *****

Clare Laufenberg
 Strategic Transmission Investment Program
 CALIFORNIA ENERGY COMMISSION
 1516 NINTH STREET, MS 46
 SACRAMENTO CA 95814
 (916) 654-4859
 claufenb@energy.state.ca.us

Jensen Uchida
 Energy Division
 AREA 4-A
 505 VAN NESS AVE
 San Francisco CA 94102 3298
 (415) 703-5953
 jnu@cpuc.ca.gov

Hallie Yacknin
 Administrative Law Judge Division
 RM. 5003
 505 VAN NESS AVE
 San Francisco CA 94102 3298
 (415) 703-1675
 isy@cpuc.ca.gov

Case Administration
 2244 WALNUT GROVE AVENUE
 ROSEMEAD CA 91770
 (626) 302-3003
 case.admin@sec.com

Don Bastady
 Sec/Tres
 BASTADY RANCHES, INC
 26389 ROAD 204
 EXETER CA 93221
 (559) 784-2094

Roger E. Bridges
 1525 E. NOBLE PMB 122
 VISALIA CA 93292
 (559) 747-3311

Tony Calcagno
 273 HIGH SIERRA DRIVE
 EXETER CA 93221
 (559) 592-0100
 nytc@aol.com

CALIFORNIA ENERGY MARKETS
 425 DIVISADERO ST. SUITE 303
 SAN FRANCISCO CA 94117-2242
 (415) 963-4439
 cem@newsdata.com

Sandy Camara
 TONY CAMARA
 30621 LYLE LANE
 EXETER CA 93221
 sandycamara@gmail.com

Paula Caviglia
 42415 ROAD 164
 OROSI CA 93647
 (559) 799-1307
 CavigliaFarms@earthlink.net

Frika Charette
 27399 RD 148
 VISALIA CA 93292
 (559) 740-2389
 echarotte@earthlink.net

Marjorie Whitendale
 EARL C AND MARJORIE R. WHITENDALE TRUST
 29305 ROAD 152
 VISALIA CA 93292
 (559) 732-6804

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

Ann Hosier
 CITY COUNSEL, FARMERSVILLE
 388 E CITRUS DRIVE
 FARMERSVILLE CA 93223
 (559) 816-1618
 annoster@yahoo.com

Leslie B. Caviglia
 Deputy City Manager
 CITY OF VISALIA
 425 E. OAK, STE 301
 VISALIA CA 93291
 (559) 713-4317
 lcaviglia@ci.visalia.ca.us

Michael Olmos
 Assistant City Manager
 CITY OF VISALIA
 315 E ACEQUIA
 VISALIA CA 93291
 (559) 713-4332
 molmos@ci.visalia.ca.us

Teresa Cortez
 660 N. BRUNDAGE AVE
 FARMERSVILLE CA 93223

Allen R. Ishida
 Tulare County Board Of Supervisors
 DISTRICT ONE
 2800 W. BURREL
 VISALIA CA 93291

Larry Doan
 29968 RD 168
 VISALIA, CA 93292
 (559) 594-5070
 doanl@aol.com

Donald L. Fulbright
 DONALD LAWRENCE COMPANY
 PO BOX 2622
 VISALIA CA 93279
 (559) 805-5330
 dfulbright@dlc4me.com

Jeff Dowien
 PO BOX 506
 EXETER CA 93221

Arnel Koster
 FREEWAY PARTNERS
 5020 W. MINERAL KING
 VISALIA CA 93291

ENVIRONMENTAL SCIENCE ASSOCIATES
 225 BUSH STREET, SUITE 1700
 SAN FRANCISCO CA 94104
 (415) 896-5900
 nyeto@esassoc.com

Doug Cover
 ENVIRONMENTAL SCIENCE ASSOCIATES
 1425 N MCDOWELL BLVD SUITE 105
 PETALUMA CA 94954-6500
 (707) 795-0945
 DCover@esassoc.com
 For: ENVIRONMENTAL SCIENCE ASSOCIATES

Jennifer Johnson
 ENVIRONMENTAL SCIENCE ASSOCIATES
 225 BUSH STREET, SUITE 1700
 SAN FRANCISCO CA 94104
 (415) 896-5900
 jjohnson@esassoc.com
 For: ENVIRONMENTAL SCIENCE ASSOCIATES

Johnny Sartuche
 Sec
 ESHOM VALLEY BAND OF INDIANS
 929 N. LOVERS LANE
 VISALIA CA 93292
 (559) 636-1136
 signsbysarch@aol.com

Sherry Estabrooks
 14870 AVENUE 360
 VISALIA CA 93292
 (559) 798-2601
 bsfarms@clearwire.net

Lois Brannan
 Director
 EXETER COURTHOUSE GALLERY
 1310 BRADLEY CT.
 EXETER CA 93221
 (599) 594-9398
 loisbrannan@msn.com

Gerald Homer
 15115 AVE 280
 VISALIA CA 93292
 (559) 747-3707

Gary & Kim Huffman
 2149 AVENUE 296
 EXETER CA 93221
 (559) 592-2288
 GKHuffman@gmail.com

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

Lydia Gargan
 PO BOX 44027
 24801 AVENUE 324
 LEMON COVE CA 93244
 (559) 737-7600
 (559) 597-2354

Dean Gordon
 29201 NORTH FILBERT ROAD
 EXETER CA 93221
 (559) 737-7600
 dean161@verizon.net

Susan Hammond
 33062 SIERRA DR.
 LEMON COVE CA 93244

Elizabeth K. Hart
 31359 DAHLEM DRIVE
 EXETER CA 93221
 (559) 594-4828

Ronda C. Hash
 15570 AVE 292
 VISALIA CA 93292
 (559) 733-7588
 rhash@kschanford.com

Diane Heaton
 3014 N. FILBERT
 EXETER CA 93221

Joel Heaton
 3014 N. FILBERT
 EXETER CA 93221

Florentino Hernandez Iii
 321 W. SWEET ANENUE
 VISALIA CA 93291
 (559) 749-0206

Cindy Homer
 15115 AVE 280
 VISALIA CA 93292
 (559) 747-3707

Judy Fisher
 PACE
 2351 N. FILBERT ROAD
 EXETER CA 94102
 (559) 594-5804
 hookme@fishheads.net
 For: Protect Agriculture, Communities, Environment

Larry Johnson
 2403 NORTH FILBERT ROAD
 EXETER CA 93221-9781
 (559) 592-5235
 lurbartjohnson@verizon.net

Tray Jones
 PO BOX 44192
 LEMON COVE CA 93244

Michael Lampman
 PO BOX 44172
 LEMON COVE CA 93244

Ted Macaulay
 MAYOR OF THE CITY OF EXETER
 CITY HALL, PO BOX 237
 137 NORTH F STREET
 EXETER CA 93221
 (559) 592-9244
 For: City of Exeter

Linda Mcween
 145 NORTH E STREET
 EXETER CA 93221
 (559) 592-5578
 lermc@clearwire.net

Michael W. Miller
 706 N. THORN COURT
 VISALIA CA 93291

MONTGOMERY FARMS
 883 JOYNER AVE.
 EXETER CA 93221

MRW & ASSOCIATES, INC
 1814 FRANKLIN STREET, STE 720
 OAKLAND CA 94612
 (510) 834-1999
 mrw@mrwassoc.com

Lloyd Thomure
 Owner
 RANCH
 21201 AVE 296
 EXETER CA 93221
 (559) 592-1201
 lethomure@hotmail.com

Randy Redfield
 21451 AVE 360
 WOODLAKE CA 93286
 (559) 564-8792
 randredfield@sbglobal.net

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

Neal Fisher
 PACE
 2351 N. FILBERT ROAD
 EXETER CA 93221
 (559) 594-5804
 For: Protect Agriculture, Communities, Environment

Kim Mcgee
 Pace Treasurer/Financial Analyst
 PACE/CITY OF VISALIA
 2399 N. FILBERT RD
 EXETER CA 93221
 (559) 280-3214
 kmcgee1012@aol.com
 For: Pace/ City of Visalia

Patricia Whitendale
 PATRICIA L. WHITENDALE REVOCABLE TRUST
 29349 ROAD 152
 VISALIA CA 93292
 (559) 733-4951

Margaret Pensar
 PO BOX 1
 LEMON COVE CA 93244-0001
 pensar3@netzero.com

Frank Perez
 LYDIA PEREZ
 Farmer
 612 N. PEPPER
 WOODLAKE CA 93286
 (559) 564-3911

Armin Pfädisch
 SUZANNE FREEMAN
 46030 SOUTH FORK DRIVE
 THREE RIVERS CA 93271

Leah Spencer
 42600A KAWEAH RIVER DRIVE
 THREE RIVERS CA 93271
 (559) 553-5108
 intuitivehealing_leah@yahoo.com

Frank Sprading
 MICHELE SPRATLING
 32017A FRITZ DR.
 EXETER CA 93221

Patricia Stearns
 166 HIGH SIERRA DR.
 EXETER CA 93221

Ty Roberts
 750 MEADOW COURT
 EXETER CA 93221
 (559) 592-5396

Irene Rubio
 PO BOX 44292
 LEMON COVE CA 93244

Tony Salerno
 MARY SALIERNO
 2803 BORDER LINKS DR.
 VISALIA CA 93291

Laurie Schwaller
 43857 SOUTH FORK DR.
 THREE RIVERS CA 93271
 qschwaller1@earthlink.net

Mark Sisco
 15364 AVE 292
 VISALIA CA 93292
 (559) 635-9704

Matthew G. Adams
 SONNENSCHNEIN NATH & ROSENTHAL LLP
 525 MARKET STREET, 26TH FLOOR
 SAN FRANCISCO CA 94105
 (415) 882-5000
 madams@sonnenschein.com

Bruce Foster
 Senior Vice President
 SOUTHERN CALIFORNIA EDISON COMPANY
 601 VAN NESS AVENUE, STE. 2040
 SAN FRANCISCO CA 94102
 (415) 775-1856

William C. Whitendale
 CLAUDIA A. WHITENDALE
 15203 AVE 292
 VISALIA CA 93292
 (559) 739-8277

***** SERVICE LIST *****
 Last Updated on 23-JUN-2009 by: JVG
 A0805039 LIST

Dell Strunge
 464 EAST JACKSON AVENUE
 TULARE CA 93274
 (559) 679-7705

Jay Cutler
 NANCY CUTLER
 TULARE COUNTY CITRUS FARMERS
 125 CARMEL STREET
 SAN FRANCISCO CA 94117
 (415) 664-0980
 jnjcjl@aol.com

Cheryl Turner
 2520 N. FILBERT RD
 EXETER CA 93221
 (559) 592-4689
 rtn@aol.com

Robert Ward
 20569 AVENUE 300
 EXETER CA 93221
 (559) 592-3004
 wardranches@earthlink.net

Jonathan K. Whitendale
 2738 E. COLLEGE AVE
 VISALIA CA 93292
 (559) 737-7551

Mathew S. Whitendale
 4147 E. MURRAY
 VISALIA CA 93292
 (559) 799-6935

The Honorable Hallie Yacknin
 Administrative Law Judge
 CPUC Docket Office
 State Building
 505 Van Ness Avenue
 San Francisco, CA 94102

KAWEAH LEMON COMPANY

PO BOX 44259 LEMON COVE CA 93244-0259

PHONE 559-597-2409

July 24, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Re: Comments on Draft Environmental Impact Report –
Southern California Edison's San Joaquin Valley Cross Valley Loop
200KV Transmission Line Project
CPUC A.08/05-039, SCH # 2008081090

I appreciate the opportunity to provide comments regarding the Draft Environmental Impact Report (DEIR) prepared for the Southern California Edison's (SCE) San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project.

The DEIR analyzes the effects of constructing transmission lines through newly acquired right-of-way along a route adjacent to Highway 198 from Visalia through Farmersville and beyond and northeast through Lemon Cove as the Proposed Project and the assesses the effects of projects that can also accomplish the project objectives through a number of alternative routes. The conclusions in the document indicate that the program objectives to provide safe and reliable electric service can be met through any of several project alternatives that are environmentally superior to the Proposed Project. On behalf of Kaweah Lemon Company and my family, I support that conclusion of the DEIR and request that the Proposed Project be rejected in favor of one of the environmentally superior project alternatives.

The DEIR identifies Alternative Route 2 as the Environmentally Superior alternative. However, the report indicates that Alternative Route 3 would have been the Environmentally Superior alternative, had it not been for impacts to Biological Resources. The DEIR states that the EIR team looked for a feasible alignment for Alternative 3 that would bypass sensitive habitat in the Stone Corral Ecological Reserve, however a bypass was not feasible.¹ The DEIR does not,

¹ DEIR page 5-7

however, provide specific information or identify the reasons that lead to that conclusion. Therefore, additional study of a potential bypass appears appropriate with the goal being to attain an alternative route that can take advantage of the environmentally superior aspects of Alternative 3 while also avoiding impacts to the critical habitat.

Attached is a study entitled "Alternative 3A Reroute Around the Stone Corral Ecological Reserve Cost Impacts," prepared by Mr. Hank Zaininger. The study was submitted as testimony before The Public Utilities Commission by PACE (Protect Agricultural Communities Environment) dated July 20, 2009 (pages 1 – 17 of the submitted testimony are attached). The study identifies a plan route to reduce potential environmental effects associated with Alternative 3. The study proposes a slight modification to Alternative 3 to avoid the state owned Stone Corral Ecological Reserve which can also incorporate careful siting of SCE towers or poles to avoid sensitive habitat, should any be found on private property along the alternate alignment. I request that consideration be given to this proposal.

Each of the three alternatives presented in the DEIR are considered to be Environmentally Superior to the Proposed Project. Each also uses existing transmission line right of way to a greater extent of the Proposed Project. The Proposed project calls for use of 1.1 mile existing right of way; Alternatives 2, 3 and 6 call for using between 8.1 to 14.6 miles of existing right of way. All three alternatives appear to adhere to the "Garamendi" principles established by the California Legislature² which:

1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
2. When construction of new transmission lines is required, encourage expansion of existing rights-of-way, when technically and economically feasible.
3. Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons, as determined by the appropriate licensing agency.
4. Where there is a need to construct additional transmission, seek agreement among all interested utilities on the efficient use of that capacity.

Specific Comments

Even with the impacts associated with the Proposed Project that were identified in the DEIR, which concludes that the Proposed Project creates the most adverse environment effects of any of the alternatives studied, the analysis

² SB 2431, Chapter 1457

O11-1

O11-1
cont.

minimizes the adverse effects and does not fully describe the full extent of the impacts on Farmland and Agricultural operations associated with the Proposed Project, as described below.

Number of Acres Affected or Adversely Impacted as the Result of the Proposed Project May be Greater than Identified

- Restrictions placed on farming operations within the right of way may effectively result in formally productive Farmland becoming unusable for citrus orchards.

The approach taken in the DEIR to assess impacts to Farmland due to orchards being within new transmission line right of way appears to assume that except for permanently removed walnut trees, there is no impact. The ability to irrigate and maintain trees will be hampered by the SCE requirements for land within the right of way. Impact 4.2-5 acknowledges that the Proposed Project could impact existing irrigation...systems...resulting in the conversion of Farmland to non-agricultural use. Mitigation Measure 4.2-5 indicates that SCE would re-route irrigation systems, etc. and the DEIR states that the mitigation measure "would ensure that no additional Farmland is indirectly converted to non-agricultural use because of the impacts to existing irrigation ...systems required for farming productivity."³

The DEIR does not quantify the number of acres of Farmland that would be affected or acknowledge the complexities of implementing the mitigation measure 4.2-5. Of particular concern are the great number of orchards that are planted with rows parallel to the right of way which therefore have irrigation lines that would be parallel, rather than perpendicular to the centerline of the right of way, as required (see Figures 2.3a – j). It is likely that the parts of orchards in this orientation, along with the irrigation systems and underground piping may need to be removed. Once this is done, the feasibility of replanting to reorient the rows and installing new irrigation systems to be compliant with right of way requirements, while incorporating the new trees in the existing orchard, will need to be assessed. It may or may not be feasible to replant, similar to the issue of the removal of walnut trees, which the DEIR indicates... "would lead to formerly productive Farmland becoming permanently unusable."⁴ It is very likely that remnant areas not feasible to be reincorporated into the existing orchard would be created. It is not likely that Mitigation Measure 4.2-2 can be implemented to achieve the its' statement that "no additional Farmland" will be converted to non-

³ DEIR page 4.2-16

⁴ DEIR page 4.2-15

O11-2



agricultural use because of the practicalities of reorienting the layout of orchards to accommodate a 100 foot wide band of restricted land cutting through existing orchards.

The DEIR indicates that the land used for work areas and pull and tension sites would be returned to agricultural use upon completion of the project.⁵ The document did not indicate if the land would become part of the right-of way, or if it would be placed in an easement. The DEIR should indicate if the land would become under permanent restriction, through easement or right of way, and evaluate the impacts associated with those impacts, if such is the case.

- The DEIR offsets the total number of Farmland lost by indicating that the area of the foot base of 12 individual existing structures which are slated for removal, each only 24 feet by 24 feet in size, can be reclaimed as Farmland.

The DEIR discusses on Page 4.2-13 that under the Proposed Project, twelve existing lattice towers would be removed that are located on farmland as designated by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP).

The area covered by each foot base, 24 feet by 24 feet, was considered to be land reclaimed for agricultural use and was used to offset the number of acres of agricultural resources lost. The report does not indicate if the individual 576 sq. ft. "new" agricultural sites were studied to determine if they could be reasonably integrated into existing farming operations. It would seem hardly worth considering. Yet, the methodology of the number of acres of farmland lost becomes important, as Mitigation Measure 4.2-2 states that for each acre that is permanently converted to non-agricultural land use, SCE would be required to obtain one acre of agricultural conservation easements. The DEIR states that "The calculations for total permanent impacts take into account this **potentially** (emphasis added) reclaimed land." By minimizing the number of acres lost, the number of acres to be placed in conservation easement and the total number of acres of Farmland identified as lost is reduced.

- There may be additional lands in Williamson Act contract than identified in the DEIR.

DEIR Figure 4.2-2 illustrates the Williamson Act Contracted Land. It appears that some properties may have been omitted. Please verify that properties identified as Tulare County Assessor Parcel Numbers 113-250-

⁵ DEIR page 4.2-11

O11-2
cont.

O11-3

O11-4



019 and 026 were included and adjust the total Williamson Act Contracted Land acres within the Proposed Project right-of-way, if appropriate. O11-4 cont.

Potential Impact to Available Water Supply

- The DEIR fails to identify and quantify the amount of water delivery systems within the Proposed Project right of way and therefore does not identify the impacts or mitigate the impacts to water production and delivery systems.

Kaweah Lemon Company owns a well and booster pump within the Proposed Project right of way in proximity to Structure #85. The booster pump receives water from Wallace Ranch Water Company whose distribution line runs parallel to the transmission lines and is within the proposed right of way which is understood to be not permitted⁶.

Kaweah Lemon Company owns a wagon wheel well, southwest of Structure # 95, which has lateral piping that extends diagonally into the right of way. Lemon Cove Ditch Company owns pipe that appears to run underneath Structure # 95 and continues to run in the right of way. Further, there is another privately owned water distribution line that runs parallel to the transmission line and within the right of way. Both of these systems run in easements across private property, one to the east and one to the south of Structure #95. Since the restrictions pertaining to uses within the Proposed Project right of way preclude parallel water delivery systems, new easements for water lines would need to be acquired. The DEIR does not discuss how new easements on private property to mitigate relocation of water lines would be achieved. The DEIR fails to identify the number of acres of citrus trees that would need to be removed in order to provide for the relocation of piping.

In addition, Wallace Ranch Water Company owns an underground line under Structure #91, which runs east within the Proposed Project right of way toward Structure # 92.

Without identifying the order of magnitude of wells and water delivery systems that are impacted by the Proposed Project, the full impacts of the project cannot be identified and the mitigation costs to the Proposed Project cannot be known. Therefore, the DEIR does not adequately identify, evaluate and mitigate impacts to water availability and water delivery systems that are essential in order to maintain productive Farmland as usable and prevent the conversion of Farmland to non-agricultural use.

⁶ DEIR page 2-40

- Loss or reduction of water supply through well and irrigation pipe relocation is likely to be more challenging to replace than indicated.

The DEIR acknowledges that there are numerous wells within the proposed right of way in the Environmental Analysis Section on Hazards and Hazardous Materials and discusses the hazards associated with the use of boom trucks or other equipment that may be necessary to maintain the wells. Mitigation Measures 4.7-11a and 4.7-11b indicate that during the construction of the Proposed Project, SCE would inventory the groundwater wells that fall with the right of way and would relocate the wells and pipes if necessary.

The Mitigation Measures appear to imply that it is a simple matter to relocate a well. However, wells on our ranch were drilled by default. It took many dry holes to find a well that hit a good water aquifer. The discussion on Groundwater Hydrology and Groundwater Quality⁷ is very general. It does not adequately describe the conditions in the east end of the Proposed Project area and foothill area, specifically with regard to availability of suitable aquifer to support well removal and replacement at the various locations where they may be needed. The inability to replace equal water supply and quality due to removal of wells found to be incompatible with transmission line right of way would adversely impact Prime Farmland and contracted Williamson Act lands. The DEIR acknowledges this impact and states that "Removing farmers' ability to irrigate crops and orchards could effectively render formerly productive Farmland unusable, resulting in the conversion of additional Farmland to non-agricultural use."⁸ Given the very serious nature of that impact and of that statement, additional documentation should be provided in the DEIR that demonstrates the mitigation is achievable. Without demonstration and documentation that supports the feasibility that the water systems can be replaced, the mitigation measure is merely empty words and is meaningless.

Mitigation Measure 4.7-11b should be amended to add "The relocated wells will be required to meet or exceed water production, including water volumes and water quality." Documentation should be provided in the DEIR to demonstrate that the mitigation measure is achievable.

Other Issues Associated with Water Systems

There is a seasonal creek, locally known as Lipsy Creek, that runs within the Proposed Project right of way and under structures 98, 99, 100, and

⁷ DEIR page 4.8-4 & 5

⁸ DEIR page 4.2-16

101. The creek runs during periods of heavy rain and runs continuously for months during wet seasons. The DEIR should acknowledge this waterway and indicate how the Proposed Project may or may not be affected by this waterway.

O11-7
 cont.

Impact to Farming Operations

- Use of Aircraft in Farming Operations

The DEIR includes a section on Agricultural Aerial Spraying in the analysis of Hazards and Hazardous Materials. The DEIR identifies one rancher's need to spray his citrus orchards from the air. The DEIR continues, however, with a discussion about crop dusting and how they operate under a waiver that allows flying several feet above ground surface and states that "pilots fly over, beside and even under transmission lines."⁹ It appears that the DEIR is attempting to describe the circumstance of aerial spraying of row crops which is not the predominate agricultural product grown within the boundaries of the Proposed Project. It is not reasonable to assume that with the pole height at a maximum 160 feet, the conductor sag minimum 32' above ground¹⁰ and tree height at a maximum 15 feet¹¹ that the discussion of aerial spraying contained in the DEIR is even remotely applicable to use of aircraft for management of orchards or the typical crops grown within the area of the Proposed Project.

O11-8

Impact 4.7-6 states that "The Proposed Project could create a safety hazard to aerial spray applicators." The DEIR attempts to mitigate this impact with Mitigation Measure 4.7-6, which indicates that SCE will provide aerial applicators with information regarding the location of the transmission lines. This Mitigation Measure does not address aerial spraying of orchards as the Proposed Project affects the ability to effectively utilize this practice.

More common than the use of aircraft for pesticide spraying is the practice of the use of helicopters for frost control in their orchards. The DEIR does not describe the practice of use of aircraft for this purpose in citrus orchards and the DEIR omits a description and analysis of the hazards created by the Proposed Project with regard to this existing practice. The DEIR should be amended to identify this practice and identify the impacts associated with the Proposed Project on the ability to implement frost

⁹⁹ DEIR page 4.7-4
¹⁰ DEIR Figure 2-6
¹¹ DEIR page 2-40

control measures which are used to prevent loss or reduction of annual citrus harvest and permanent loss of tree stock.

O11-8
 cont.

Physical Division of an Established Community

Impact 4.9-1¹² indicates the Proposed Project could physically divide an established community. The discussion that follows indicates that the Proposed Project would pass through the community of Lemon Cove. It states "...all homes in Lemon Cove would be located on the north side of the alignment, and there are no buildings currently located to the south of the Proposed Project alignment." As evidenced by the aerial photographs on DEIR Figures 2-3h and 2-3i, the statement is clearly not factual. The DEIR should be corrected to accurately describe the condition of the Proposed Project as it passes through Lemon Cove.

O11-9

Other Considerations

California State Parks has issued a Central Valley Vision Draft Implementation Plan. The Draft Implementation Plan focuses on helping to meet the public's recreation needs in the Central Valley. It outlines specific initiatives to build economic and volunteer partnerships, acquire new park lands and develop new and improved recreation opportunities. The plan includes a proposal to develop a new park identified as Rocky Hill at Exeter which would:

- Acquire about 2,300 acres to create a new park that celebrates Native American culture.
- Develop accessible trails and viewing platforms to view the rock art.
- Develop a visitor center and museum, 50 picnic sites, self-guided interpretive trails and a vista point.¹³

O11-10

The DEIR should identify how this planned park resource may be affected by the Proposed Project with regard to cultural and aesthetic impacts.

Summary

The DEIR provides three alternative routes, each of which is identified as Environmentally Superior to the Proposed Project. Each of the alternatives utilizes existing right of way which is consistent with principles adopted by the State Legislature. There is the potential that Alternative 3 can be made to be the

O11-11

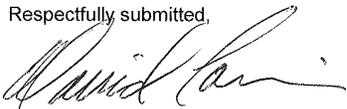
¹² DEIR page 4.9-14
¹³ Central Valley Vision Draft Implementation Plan, California State Parks, Planning Division, October 28, 2008, page 23

most Environmentally Superior with a minor alteration in the proposed alignment. Each of the three alternatives can accomplish the project objectives to provide safe and reliable electric service.

I respectfully request that the California Public Utilities Commission consider the conclusions of the Draft Environmental Impact Report and the comments in this correspondence, reject the Proposed Project, and select an alternative environmentally superior route. It is our hope that Alternative 3 will rise to the designation of being the Environmentally Superior project, with the minor adjustment in the alignment, which would then warrant selection of this alternative. I appreciate the opportunity to review and provide comment on the document.

O11-11
cont.

Respectfully submitted,



David Cairns, Partner
Kaweah Lemon Company

Attachment: Opening Testimony of Pace (Protect Agriculture Communities Environment), submitted to the State Of California Public Utilities Commission, dated July 20, 2009, pages 1 – 17.

Contact Information:

David Cairns, Partner
Kaweah Lemon Company
PO BOX 44259
Lemon Cove, CA 93244
Telephone: 559-597-2409
Email: Kaweahl@aol.com

Lon W. House, Ph.D.
Representing PACE

4901 Flying C Rd.
Cameron Park, CA 95682
Telephone: (530) 676-8956
Facsimile: (530) 676-8947
E-mail: lwhouse@innercite.com

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN)
CALIFORNIA EDISON COMPANY (U-338-E))
for a Certificate of Public Convenience and)
Necessity for the San Joaquin Cross Valley Loop)
Transmission Project)

A.08-05-039
(Filed May 30, 2008)

OPENING TESTIMONY OF PACE
(PROTECT AGRICULTURE COMMUNITIES ENVIRONMENT)

O11-12

Date: July 20, 2009

TABLE OF CONTENTS

I. INTRODUCTION..... 3

II. ALTERNATIVE 3A REROUTE AROUND THE STONE CORRAL ECOLOGICAL RESERVE COST IMPACTS – Witness Hank Zaininger..... 3

III. RIGHT OF WAY COSTS – Witness John Kirkpatrick..... 18

IV. CONCLUSION AND RECOMMENDATIONS 20

STATEMENT OF QUALIFICATIONS..... 21

CERTIFICATE OF SERVICE..... 25

O11-12
cont.

I. INTRODUCTION

In the Assigned Commissioner’s Scoping Memo and Ruling¹ the Commission requested additional testimony on

“5. Are the mitigation measures or project alternatives infeasible? (CEQA Guideline 15091(a)(3).) This issue includes consideration of community values pursuant to Pub. Util. Code § 1002(a)(1).

6. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative? (CEQA Guideline § 15093.)

...

8. Is the proposed project and/or project alternative designed in compliance with the Commission’s policies governing the mitigation of EMF effects using low-cost and no-cost measures? (GO 131-D, Part X.)

9. If a certificate is granted, what is the maximum cost of the approved project? (Pub. Util. Code § 1005.5(a).)” (Scoping Memo, pg. 4)

The PACE (Protect Agriculture Communities Environment) opening testimony addresses (5) mitigation measures, (6) unavoidable impacts, and (9) the cost of an approved project².

O11-12
cont.

II. ALTERNATIVE 3A REROUTE AROUND THE STONE CORRAL ECOLOGICAL RESERVE COST IMPACTS – Witness Hank Zaininger

Section 5 of the draft Environmental Impact Report³ compares the San Joaquin Cross Valley Loop (SJXVL) project alternatives. In Section 5.3, p.5-7, the report states that Alternative 3 results in the least impacts on agricultural resources, but due to unmitigable impacts to biological resources Alternative 3 would not be environmentally superior. Further, the report states that the EIR team looked for a feasible alignment (reroute) for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological

¹ Dated June 23, 2009.

² The Scoping Memo orders, on page 7: *“Issue No. 9: Edison has provided prepared testimony on the cost of its proposed project and Alternatives 2 and 3. We direct Edison to serve this prepared testimony pursuant to the schedule set forth in this ruling, and to provide additional prepared direct testimony setting forth its cost estimate for Alternative 6, taking into account the limitations presented by the schedule set forth in this ruling. Any party to the proceeding (see Rule 1.4) may offer prepared rebuttal testimony on this issue.”* Rather than wait for rebuttal testimony, which would have hampered other parties ability to respond, we are providing this testimony in our opening comments.

³ Southern California Edison’s San Joaquin Cross Valley Loop 220 kV Transmission line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, June 2009.

Reserve⁴. However, they could not find a feasible reroute due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the reserve. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided through rerouting, Alternative 2 was selected as the environmentally superior route.

This testimony summarizes the results of my independent investigation into finding a preliminary feasible reroute of Alternative 3 to bypass the Stone Corral Ecological Reserve and its impact on the cost of the proposed project. In summary, the results of this preliminary investigation are Alternative 3 is modified slightly to reroute the new double circuit San Joaquin Cross Valley Loop transmission line around the Stone Corral Ecological Reserve, avoid construction within the ecological reserve, and avoid disturbing the two existing Big Creek – Rector 220 kV transmission lines crossing within the ecological reserve⁵.

Figure 4.4-4 in Section 4 of the draft Environmental Impact Report shows the location of the Stone Corral Ecological Reserve and generally defines designated critical habitat in the vicinity. The proposed Alternative 3A reroute path is shown in Figure 1. Figure 2 shows a closer view of the Stone Corral Ecological Reserve and surrounding area with the ecological reserve area outlined in blue, the existing Big Creek – Rector 220 kV transmission lines path across the ecological reserve marked in white, and the proposed preliminary Alternative 3A reroute path around the ecological reserve marked in yellow.

⁴ PACE representatives called the CPUC Environmental Project Manager, on June 26, 2009 to request backup data to support the above statements in the draft Environmental Impact Report. He did not have any further backup information available describing the potential reroutes studied.

⁵ Called Route 3A in this testimony.

O11-12
cont.



Figure 1. Alternative 3A Reroute to Bypass the Stone Corral Ecological Reserve

O11-12
cont.



Figure 2. Closer view of Stone Corral Ecological Reserve area outlined in blue, existing line path shown in white, and proposed preliminary Alternative 3A reroute shown in yellow.

O11-12
cont.

For the preliminary Alternative 3A reroute, the new double circuit 220 kV San Joaquin cross valley loop transmission line leaves the existing Big Creek – Rector 220 kV transmission lines right of way South of Avenue 376 approximately 11.6 miles north of the Rector Substation. First, the line proceeds easterly approximately 1200 feet through existing newly planted orchard. Second, the line proceeds northeasterly approximately 4400 feet through previously cultivated fields, which apparently are private property, to a point about 50 feet east of Road 152 and about 1250 feet South of Avenue 384. Third, the line proceeds north approximately 2400 feet through a previously cultivated field, which apparently is private property, across Avenue 384 and through an orchard to an abandoned railroad right of way. Fourth, the line proceeds northwesterly approximately 4100 feet along the abandoned railroad right of way to a point about 50 feet east of the existing Big Creek – Rector 220 kV transmission lines and north of the ecological reserve. Fifth, the line then proceeds north adjacent to the existing Big Creek – Rector 220 kV transmission lines to the point of intersection approximately 14.6 miles north of the Rector Substation, where the new line proceeds easterly and crosses Stokes Mountain as before.

Preliminary tower spotting for the Alternative 3A reroute is shown in Figures 3 through 7. The preliminary tower spotting uses span lengths between structures similar to those used in the preliminary tower spotting for the alternative routes presented in Section 2 and Appendix C of the draft Environmental Impact Report. Figures 3 through 7 are black and white copies of Pages 18 through 22 of the Alternative 3 Road Story⁶ respectively with the Alternative 3A preliminary line reroute centerline, towers and poles marked in red. The new Alternative 3A reroute structures added to bypass the Stone Corral ecological reserve are labeled alphabetically to differentiate them from the existing Alternative 3 structures passing through the reserve.

Figure 3 shows Alternative 3A replacement pole structure #58 and new pole structure #58 replaced with dead end double circuit tower structures relocated South of Avenue 376. The two existing Big Creek – rector 220 kV lines will transition to double circuit configuration at the relocated replacement tower structure #58. The new double circuit San Joaquin cross valley loop transmission line exits the existing right of way, proceeding easterly to a new tower structure A. All construction associated with the placement of these towers, transitioning the existing Big Creek – rector lines to double circuit configuration, and conductor stringing will be located East of Road 144 and South of Avenue 376, which is outside the Stone Corral Ecological Reserve.

⁶ Southern California Edison's San Joaquin Cross Valley Loop 220 kV Transmission Line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, Appendix C, Section 2.

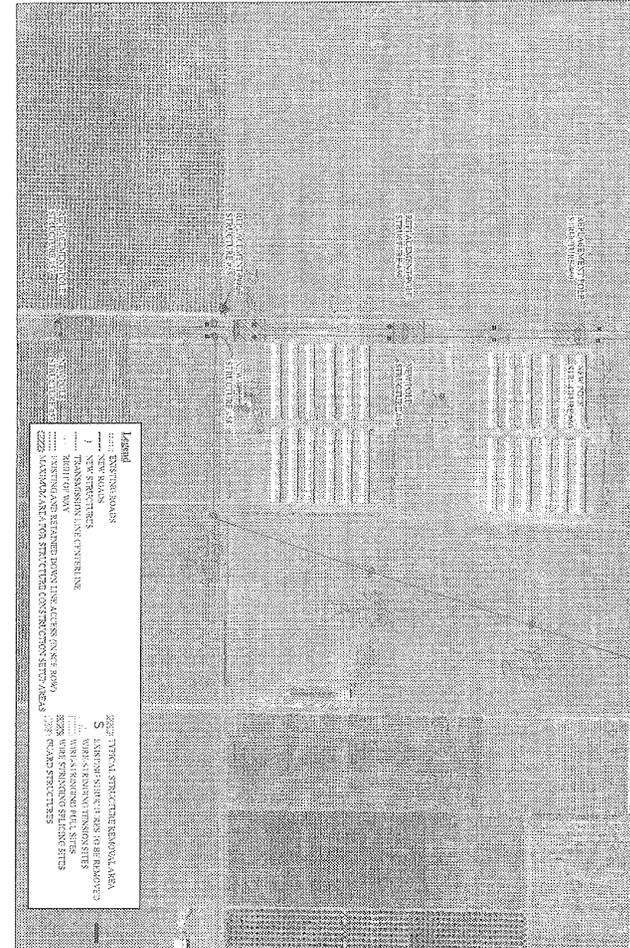
O11-12
cont.

Figures 3 and 4 show the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure A to the next point of intersection, tower structure E located East of Road 152 and South of Avenue 384, using three tangent pole structures, B, C, and D.

Figure 4 also shows the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure E to the next point of intersection, tower structure G located on the abandoned railroad right of way and north of Avenue 384, using one tangent pole structure, F.



O11-12
cont.



O11-12
cont.

Figure 3. Alternative 3 Road Story, Page 18, with Reroute Marked in Red

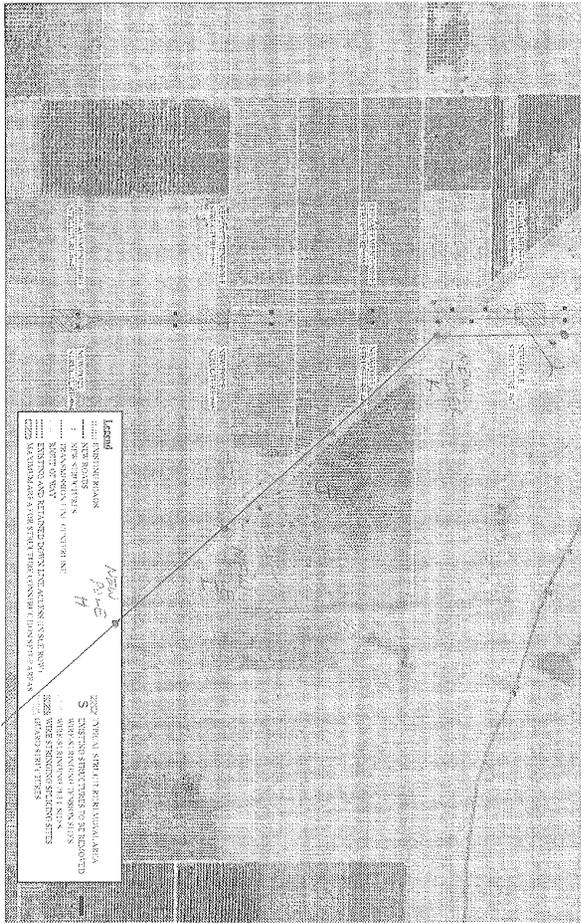


Figure 5. Alternative 3 Road Story, Page 20, with Reroute Marked in Red

O11-12
cont.

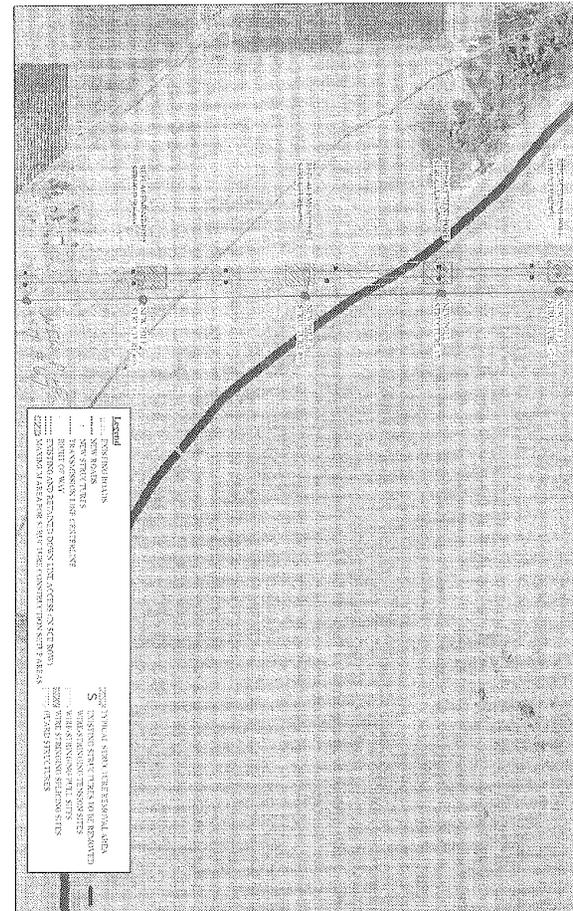
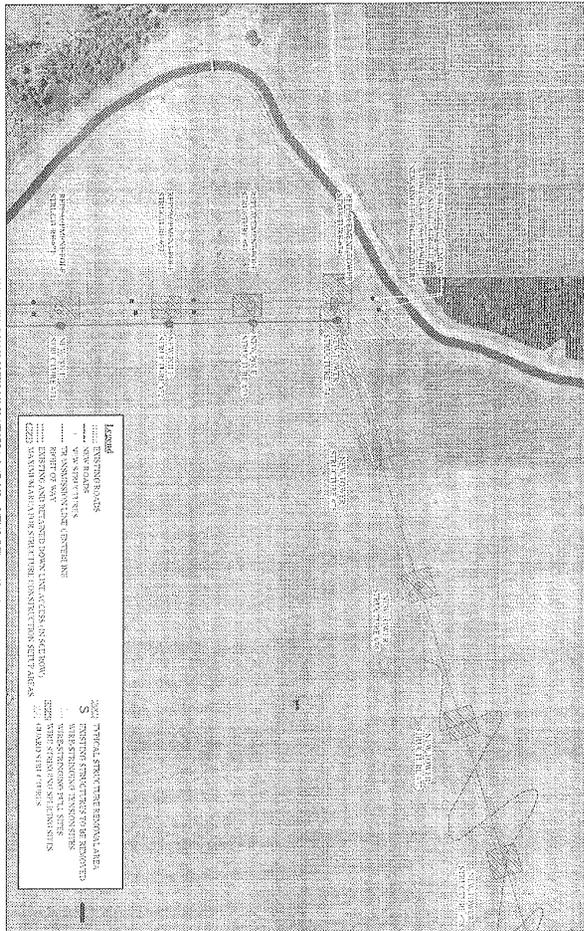


Figure 6. Alternative 3 Road Story, Page 21, with Reroute Marked in Red

O11-12
cont.



result in the following approximate incremental impacts on Alternative 3 direct costs with contingency presented in Appendix A of SCE’s cost support testimony⁷:

Table 1. Cost Impact of Route 3A Reroute Around Stone Corral

Line No.	Alternative 3 Cost \$1000	Alternative 3A Reroute Cost \$1000	Cost Change \$1000
10	10,620	8,690	-1,930
11	43,465	30,200	-13,265
12	68,380	69,800	1,420
Total			-13,775

In Line 10 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to remove 14.6 miles of existing Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$10,620,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 10 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 removal cost of \$8,090,000 in Line 6 of Appendix A.

In Line 11 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to build 14.6 miles of new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$43,465,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further north than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 11 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line rebuild cost of \$28,140,000 in Line 7 of Appendix A.

In Line 12 of Appendix A of SCE’s cost support testimony, for Alternative 3A, the estimated cost to build 24.3 miles of new double circuit 220 kV transmission line is \$68,380,000. For the Alternative 3A reroute, the new SJXVL transmission line is about 0.5 miles longer. So Line 12 for the Alternative 3A reroute in Table 1 is assumed to cost about 24.8/24.3 times the corresponding Alternative 3 new double circuit SJXVL transmission line cost in Line 12 of Appendix A.

⁷ Southern California Edison Company’s Testimony on San Joaquin Cross-Valley Loop Project (SJXVL) Cost Support for SJXVL Project and Alternatives, Frank Harris, June 26, 2008.

O11-12 cont.

These Line 10, 11 and 12 incremental direct cost changes for the Alternative 3A reroute result in expected total direct cost savings with contingency of about \$13,775,000 compared to Alternative 3 original estimates.

Assuming a P&B and A&G rate of 7.5% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting total direct plus contingency plus P&B and A&G cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$14,800,000. In addition, assuming an AFUDC rate of 12.6% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting AFUDC cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$1,900,000.

On July 13, 2009, members of PACE, David Cairns and Carol Cairns, and Phyllis Coring (consultant) and I met with two representatives of the California Department of Fish and Game, Justin Sloan, Environmental Scientist responsible for the Stone Corral Ecological Reserve, and his supervisor, Annee Ferranti, Senior Environmental Scientist, to discuss the feasibility of rerouting Alternative 3 around the ecological reserve. We discussed the proposed preliminary Alternative 3A reroute around the ecological reserve described above. In summary their opinion was that it will be feasible to reroute Alternative 3A around the Stone Corral Ecological Reserve on private property. There is critical habitat only in some spots in the previously cultivated fields outside the ecological reserve. These areas can be specifically identified with a biological survey, and the preliminary Alternative 3A reroute transmission structures relocated appropriately to avoid these areas.

Summing up, this preliminary Alternative 3A reroute bypasses the Stone Corral Ecological Reserve by crossing a small amount of orchards, crossing previously cultivated fields, which apparently are private property, utilizing an abandoned railroad right of way, and avoiding residential structures. This Alternative 3A reroute will mitigate the impacts to the sensitive habitat located within the Stone Corral Ecological Reserve described in the draft Environmental Impact Report. The Alternative 3A reroute also provides the flexibility to adjust structure locations to appropriately mitigate any identified biological resources in sensitive habitat located on private property outside the ecological reserve on the alternative 3A reroute path, while still resulting in the least amount of impacts to agricultural resources. This Alternative 3A reroute is feasible and it will significantly reduce the costs of constructing Alternative 3.

O11-12 cont.

WALLACE RANCH WATER COMPANY

PO BOX 44259 LEMON COVE CA 93244-0259

PHONE 559-597-2409

July 24, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Re: San Joaquin Cross Valley Loop Transmission Project, Draft EIR

The Wallace Ranch Water Company submits the following comments regarding the San Joaquin Cross Valley Loop Transmission Project, Draft Environmental Impact Report (DEIR).

The Wallace Ranch Water Company owns water delivery systems within the boundaries of the Proposed Project. Specifically, Wallace Ranch Water Company owns an underground water distribution line that appears to run under Structure # 91 and then runs east within the proposed right of way toward Structure # 92. We understand from the section in the DEIR that indicates the requirements for uses within the proposed right of way, found on page 2-40 of the DEIR, that facilities within the right of way must be perpendicular to the centerline of the right of way. The Wallace Ranch Water Company underground facilities would run parallel to the transmission lines and therefore would apparently need to be relocated, should the Proposed Project be the route selected.

O12-1

The DEIR does not provide adequate description of the water delivery systems in the project area, does not identify or quantify the number of systems that would need to be

O12-2

relocated, or provide mitigation to the impacts that would be created by the Proposed Project that can be shown to be feasible to implement. The DEIR merely states that the issues of water supply and delivery will be addressed and solved during the construction phase of the project. The DEIR does not address the issues that could affect the ability to replace displaced water systems. For example, it may not be a simple matter to drill replacement wells that can provide the water volume and quality of existing wells, as the character of the aquifer varies throughout the region. Also, existing water delivery systems run through easements on private property. The DEIR does not discuss the complexities or impacts to Farmland of acquiring new easements for water systems owned by water companies through private property owned by others. The DEIR does not identify the impacts to loss of Farmland that would occur with the relocation of water distribution systems. The DEIR should be amended to include a full discussion of water issues and impacts associated with the Proposed Project.

O12-2
cont.

The DEIR identifies that each of the Project Alternatives considered are environmentally superior to the Proposed Project. Each of the alternatives utilizes existing public utility right of way to a much greater extent than the Proposed Project. Of the alternatives, the Wallace Ranch Water Company requests that Alternative 3, as modified to avoid sensitive habitat in the Stone Corral Ecological Reserve, be selected as the ultimate Project. This will greatly reduce impacts to Farmland, water systems and agricultural resources from what is being considered in the Proposed Project.

O12-3

Sincerely,

David Cairns, Secretary/Manager
Wallace Ranch Water Company

Contact Information:
David Cairns, Secretary/Manager
Wallace Ranch Water Company
PO BOX 44259, Lemon Cove, CA 93244
Telephone: 559-597-2409, Email: Kaweahl@aol.com



California Natural Resources Agency
 DEPARTMENT OF FISH AND GAME
 Central Region
 1234 East Shaw Avenue
 Fresno, California 93710
 (559) 243-4005
 http://www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
 DONALD KOCH, Director



Comment Letter O13

Comment Letter O13

July 27, 2009

Jensen Uchida
 San Joaquin Cross Valley Loop Project
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, California 94104

Subject: San Joaquin Cross Valley Loop Transmission Project Draft
 Environmental Impact Report (DEIR), SCH No. 2008081090

Dear Mr. Uchida:

The Department of Fish and Game has reviewed the DEIR submitted by the California Public Utilities Commission (CPUC) for the above Project. Project approval would allow Southern California Edison (SCE) to loop the existing Big Creek 3-Springville 220 kV transmission line into the existing Rector Substation by constructing 18.5 miles of new transmission line and replacing 1.1 miles of existing transmission line. The Project also proposes to modify the Rector Substation and to remove wave traps and line tuners and install protective relays at the Rector, Springville, Vestal, and Big Creek 3 Substations. The proposed Project is located in northwestern Tulare County, near the cities of Visalia, Farmersville, and Exeter.

The DEIR analyzes four Project alternatives (Alternatives 2, 3, 6 and a No Project Alternative) in addition to the proposed Project. Alternative 2 was selected as the Environmentally Superior Alternative due to reduced impacts on agricultural resources and the absence of significant, unmitigable impacts to biological resources.

Alternative 3 would traverse the Department's Stone Corral Ecological Reserve (SCER) and could involve a significant reduction in the beneficial use of the land. While Alternative 3 was not chosen as the Environmentally Superior Alternative due to impacts to SCER and its associated rare biological resources, the DEIR describes the potential for SCE to pursue legal condemnation to obtain right-of-way easements on SCER should Alternative 3 be chosen by the CPUC. It is unclear whether or not SCE has the legal authority to condemn portions of the State-owned SCER for the placement, construction, and operation of the transmission line. Further, even if it were legally feasible for a private utility to condemn an easement on State-owned land, the CPUC would first need to provide evidence that the use of portions of SCER as part of the Cross Valley Loop is the best and most necessary public use of the property. It

O13-1

Jensen Uchida
 July 27, 2009
 Page 2

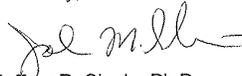
should be noted that Code of Civil Procedure Section 1240.680(a)(4) states that an ecological reserve established under Fish and Game Code Section 1580, as SCER was, is presumed to be the "best and most necessary" public use of the property. The Department feels that the placement of the transmission line through SCER would significantly impact the Department's ability to manage the property for its originally designated use and would also greatly reduce the biological value of the property.

O13-1
 cont.

The DEIR addresses the biological importance of SCER and the significant, unmitigable Project-related impacts that would occur should the alignment described in Alternative 3 be selected. The Department agrees with the assessment made in the DEIR that construction of the Alternative 3 alignment, as currently proposed, "could have substantial permanent impacts on the vernal pool habitat and hydrology."

If you have any questions regarding these comments, please contact Justin Sloan, Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4014, extension 216.

Sincerely,


 Jeffrey R. Single, Ph.D.
 Regional Manager

cc: State Clearinghouse
 Office of Planning and Research
 1400 Tenth Street
 Sacramento, California 95812-3044

ec: Scott Flint
 Department of Fish and Game
 Renewable Energy Branch

Annee Ferranti
 Department of Fish and Game
 Central Region

From: Ken Womack [mailto:chiefrph@yahoo.com]
Sent: Wednesday, July 29, 2009 11:49 AM
To: San Joaquin Cross Valley Loop Project
Subject: San Joaquin Cross Valley Loop Transmission Lines

ROCKY HILL
INCORPORATED
20700 AVENUE 314
POST OFFICE BOX 175
EXETER, CALIFORNIA 93221
TELEPHONE (559) 592-2104

July 29-09

Mr. Jensen Uchida,

First let me take a moment to comment on the huge crowd of excited people gathered at the public hearing July 23rd, at Visalia Convention Center. This shows how important this subject is to the local residents and I believe will help to inform everyone of the impact these lines have. The input from the residents effected most, will help, I believe will allow the California PUC to come to the best decision for all affected.

My concern with the location, Alternative 2 through the Elderwood area affects some of my clients negatively. I own CJ Hammers Pump Co., in Visalia, CA and several of my clients have wells that may be impacted by this route. In particularly those with the older Wagon Wheel wells developed years ago.

These wells which consist of one deep shaft and several laterals drilled by lowering men down the main shaft and drilling by hand can no long be constructed, due to the danger associated with the process. These wells tend to produce several hundred gallons of water per minute and therefore can irrigate sever hundred acres with just the one well and pumping system. To replace one Wagon Wheel Well at a production of 1800/gpm would require up to 18 Rock wells and pumping systems at a cost of 25 to 30 thousand per well and pumping system. Not to mention the fact that a large percent of the holes drilled may not produce enough water to be useful at all. I myself have 15 acres just above Elderwood and I have 5 wells of which only 3 produce enough water to be useful. My maximum production is around 150/gpm and even this drops off late in the summer.

By my calculation, which are only estimates it could cost as much as 1/2 million dollars to replace ONE Wagon Wheel well, to allow the property owner to continue to farm say 200 acres. With the legal restriction and other cost in today's farming markets, in many cases this would render the property unsuitable to continue to be farmed and in fact could ultimately reduce the proper value.

I hope this information sheds some light on the inherent problems associated with the construction of the Transmission lines over productive farm property. The best resolution I see at this time is use of Alternative 3 through the less viable farming property.

Respectfully

Ken. W. Womack, Owner
CJ Hammers Pump Co.
131171 Ave 328
PO Box 311
Visalia, CA 93279
Phone; 559-734-9203

Public Comment
San Joaquin Cross Valley Loop Transmission Proposed Project

Rocky Hill Inc.
P.O. Box 175
Exeter, California
93221

Rocky Hill Inc. is a diversified, family owned, ranching corporation. We have a ranch on Avenue 320 (Cottage P.O. Drive). Under the Southern California Edison's proposed San Joaquin Valley Cross Valley Loop Transmission project, four structures would be erected on Rocky Hill property (Structures 77, 78, 79, 80). This would have a significant negative impact on our ranching operation.

Rocky Hill Inc. has a pipeline that goes from the Foothill Ditch along Avenue 312 to Road 212. This pipeline extends over two miles and is directly under the Southern California Edison's proposed project. Our water engineers have estimated that it will cost over \$500,000 to replace this pipeline. Obviously, this would have a definite significant negative impact on our ranching corporation.

It makes absolutely no sense to go through prime, residential agriculture property when you could be going through foothill range land (Alternate 3) where it actually would be beneficial to the property owners. It would create much needed firebreaks and access to their foothill range property.

Thank you for allowing our corporation to comment on this disastrous proposed project. Please send us a paper copy of the Final EIR.

O14-1

O15-1

(415) 896-0332

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

In the Matter of the Application of SOUTHERN)
CALIFORNIA EDISON COMPANY (U-338-E))
for a Certificate of Public Convenience and)
Necessity for the San Joaquin Cross Valley Loop)
Transmission Project)
A.08-05-039
(Filed May 30, 2008)

TABLE OF CONTENTS

I. INTRODUCTION.....3
II. ACTIONS LISTED AS UNMITIGABLE THAT ARE MITIGABLE - REROUTE OF ALTERNATIVE 3.....3
III. ACTIONS LISTED AS MITIGABLE THAT ARE UNMITIGABLE - RELOCATION OF WATER WELLS.....4
IV. R EQUIRED GHG ANALYSIS NOT INCLUDED.....5
IV. CONCLUSION AND RECOMMENDATIONS.....7

**PACE (PROTECT AGRICULTURE COMMUNITIES ENVIRONMENT)
COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT**

Submitted to:
Mr. Jensen Uchida,
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Ste 1700
San Francisco, CA 94104-4207
E-mail: sjxvl@esassoc.com
Via: email

Submitted by:
Lon W. House, Ph.D.
Representing PACE

4901 Flying C Rd.
Cameron Park, CA 95682
Telephone: (530) 676-8956
Facsimile: (530) 676-8947
E-mail: lwhouse@innercite.com

Date: July 30, 2009

I. INTRODUCTION

In accordance with the Notice of Availability of Draft Environmental Impact Report¹ we are providing comments on the DEIR.

The Draft Environmental Impact Report is a deficient document. It lists actions as unmitigable actions that are mitigable, lists actions as mitigable that are unmitigable, and does not do the required greenhouse gas (GHG) impact analysis.

II. ACTIONS LISTED AS UNMITIGABLE THAT ARE MITIGABLE - REROUTE OF ALTERNATIVE 3

Section 5 of the draft Environmental Impact Report² compares the San Joaquin Cross Valley Loop (SJXVL) project alternatives. In Section 5.3, p.5-7, the DEIR states that Alternative 3 results in the least impacts on agricultural resources, but due to unmitigable impacts to biological resources Alternative 3 was not environmentally superior. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided, Alternative 2 was selected as the environmentally superior route.

The testimony of Mr. Hank Zaininger served in this docket is included as a separate Attachment 1 (due to their size). Mr. Zaininger's investigation found that Alternative 3 can be modified slightly to reroute the new double circuit San Joaquin Cross Valley Loop transmission line around the Stone Corral Ecological Reserve, avoid construction within the ecological reserve, and avoid disturbing the two existing Big Creek – Rector 220 kV transmission lines crossing within the ecological reserve.

In summary, the identified Alternative 3A reroute bypasses the Stone Corral Ecological Reserve by crossing a small amount of orchards, crossing previously cultivated field, utilizing an abandoned railroad right of way, and avoiding residential structures. This Alternative 3A reroute will mitigate the impacts to the sensitive habitat located within the Stone Corral Ecological Reserve described in the draft Environmental Impact Report. The Alternative 3A reroute also provides the flexibility to adjust structure locations to appropriately mitigate any identified biological resources in sensitive habitat located on

¹ Dated June 16, 2009.
² Southern California Edison's San Joaquin Cross Valley Loop 220 kV Transmission line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, June 2009

private property outside the ecological reserve on the Alternative 3A reroute path, while still resulting in the least amount of impacts to agricultural resources.

You will note in Mr. Zaininger's testimony he met with representatives of the California Department of Fish and Game to discuss the feasibility of rerouting Alternative 3 around the ecological reserve. Their opinion was that it will be feasible to reroute Alternative 3A around the Stone Corral Ecological Reserve on private property.

III. ACTIONS LISTED AS MITIGABLE THAT ARE UNMITIGABLE - RELOCATION OF WATER WELLS

The DEIR is a poor job in assessing groundwater resources in the area (pages 4.6-3). Mitigation Measures 4.7-11a and 4.7-11b indicate that during the construction of the Proposed Project, SCE would inventory the groundwater wells that fall within the right of way and would relocate the wells and pipes if necessary.

This area generally does not have a defined aquifer that one can simply punch another borehole into and find water, particularly in the foothill area, where groundwater is found in channels in the rock.

There are many comments on this subject received by you. Rather than duplicate them here I will simply provide you with selected comments:

"Thus it may not be possible to 'relocate' such wells." comments on DEIR of Kenneth Schmidt, page 2

"However, wells on our ranch were drilled by default. It took many dry holes to find a well that hit a good water aquifer." comments of Kaweah Lemon Company on DEIR, pg 6

"For example, it may not be a simple matter to drill replacement wells that can provide the water volume and quality of existing wells, as the character of the aquifer varies throughout the region. Also, existing water delivery systems run through easements on private property." comments of Wallace Ranch on DEIR, pg 2.

In summary, the DEIR has no basis for making the assertion that the relocation of water wells and water producing facilities in the line right-of-ways is a mitigable action. And, as certified hydrologist Kenneth Schmidt states:

"My review of the alternative alignments indicates that Alternative No. 3 would generally be the least problem in terms of having to mitigate existing water supply wells." comments of Kenneth Schmidt on DEIR, pg. 2

O16-1 cont.

O16-2

O16-1

IV. REQUIRED GHG ANALYSIS NOT INCLUDED

In April 2007, the Office of the Attorney General sued San Bernardino County for failing to properly analyze GHG (green house gas) in its EIR adopted with the update to its General Plan. This lawsuit led to the passage of Senate Bill 97, which required the Office of Planning and Research (OPR) to draft CEQA Guidelines to advise lead agencies and the public of how the impacts of GHG should be analyzed and mitigated under CEQA.

The new CEQA Guidelines, as finalized and submitted to the Natural Resources Agency on April 13, 2009, are required to be adopted and certified not later than January 1, 2010. These Guidelines as drafted by the OPR contain no quantitative amounts to determine what level of project or program emissions of GHG should be deemed significant.

The obvious impact of the proposed transmission line and alternatives is the removal of vegetation (primarily trees) from the right of way, and the inability to continue farming operation in the right-of-way. As Kaweah lemon Company states in its comments:

“The ability to irrigate and maintain trees will be hampered by the SCE requirements for land within the right of way. Impact 4.2-5 acknowledges that the Proposed Project could impact existing irrigation...systems...resulting in the conversion of Farmland to non-agricultural use.” Comments of Kaweah Lemon Company on DEIR, page 3.

The removal of farming operations in the transmission line right-of-way will remove carbon sequestering vegetation from the environment, resulting in an increase in atmospheric GHG. To assess this impact, we identified the acres of orchard and permanent crop land in the various right-of-ways, and determined their annual carbon sequestration by crop type using the definitive study in this area (Kroodsma, David and Chrisopher Field, "CARBON SEQUESTRATION IN CALIFORNIA AGRICULTURE, 1980–2000", Ecological Applications, 16(5), 2006, pp. 1975–1985). As the following table shows, removing this orchard and permanent cropland from production will have varying amounts impacts on the sequestration of GHG. Alternative 3, because it transveres the least amount of orchard and cropland, will have the least GHG impact..

O16-3 cont.

O16-3

ANNUAL CARBON SEQUESTRATION TON/ACRE/YEAR(1)	CROP - LAND USE	ACRES BY CROP TYPE - LAND USE				CARBON IMPACTS OVER LIFE OF LINE			
		Proposed	Alternative	Alternative	Alternative	Tons of CARBON	Tons of CARBON	Tons of CARBON	Tons of CARBON
		Project 1	2	3	6	Project 1	Alternative 2	Alternative 3	Alternative 6
0.48	Almond		15.9	15.9	11.6	0	380	380	277
0.24	Cherry	2.6	5.2	7.8	5.2	31	62	93	62
0.24	Citrus				2.3	0	0	0	27
0.16	Grape		4.3			0	34	0	0
0.24	Grapefruit	0.2				2	0	0	0
0.16	Kiwi		6.5	5.8	6.5	0	52	46	52
0.24	Lemon	2.9				35	0	0	0
0.24	Nectarine		1.5			0	18	0	0
0.24	Olive	5.6	12.7	11.6	16.7	67	152	139	200
0.20	Orange-Orange-Grapefruit Mix	108.1	94.2	73.1	125.4	1,076	938	728	1,249
0.24	Peach	1.9				23	0	0	0
0.40	Plum		1.1	1.1	1.1	0	22	22	22
0.24	Pomegranate	3.0				36	0	0	0
0.24	Tangerine	2.6	8.4	2.4	2.5	31	100	29	30
0.40	Walnut	36.0	25.2	25.2	25.2	717	502	502	502
	Totals - Acres								
	Totals - Listed Cropland	175.8	194.0	152.9	200.1	2,275	2,638	2,137	2,492
	Total Acres in Right of Way	231.5	344.2	381.8	297.6				
(1)Kroodsma, David and Chrisopher Field,"CARBON SEQUESTRATION IN CALIFORNIA AGRICULTURE, 1980–2000", Ecological Applications, 16(5), 2006, pp. 1975–1985.									

V. CONCLUSION AND RECOMMENDATIONS

PACE comments in this Draft EIR identifies a route around the “unmitigatable” impacts to biological resources of Alternative 3, provides references to comments that the water well and infrastructure impacts of the various routes are not mitigable impacts and notes that Alternative 3 is the preferred route from a water supply perspective, and provides an illustration of a required GHG impact analysis of the various routes, with Alternative 3 providing the smallest GHG impact.

We would also request, due to deficiencies in the DEIR, that the final EIR be recirculated for comments before adoption.

Route 3, with the adjustments described in this testimony, should be the Commissions preferred route from an environmental perspective.

Respectfully,



By: /s/

Lon W. House, Ph.D.
Representing PACE
(Protect Agriculture Communities Environment)

4901 Flying C Rd.
Cameron Park, CA 95682
Telephone: (530) 676-8956
Facsimile: (530) 676-8947
E-mail: lwhouse@innercite.com

Date: July 20, 2009

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

In the Matter of the Application of SOUTHERN)
CALIFORNIA EDISON COMPANY (U-338-E))
for a Certificate of Public Convenience and)
Necessity for the San Joaquin Cross Valley Loop)
Transmission Project)

A.08-05-039
(Filed May 30, 2008)

OPENING TESTIMONY OF PACE
(PROTECT AGRICULTURE COMMUNITIES ENVIRONMENT)

Lon W. House, Ph.D.
Representing PACE

4901 Flying C Rd.
Cameron Park, CA 95682
Telephone: (530) 676-8956
Facsimile: (530) 676-8947
E-mail: lwhouse@innercite.com

Date: July 20, 2009

TABLE OF CONTENTS

I. INTRODUCTION..... 3

II. ALTERNATIVE 3A REROUTE AROUND THE STONE CORRAL ECOLOGICAL RESERVE COST IMPACTS – Witness Hank Zaininger..... 3

III. RIGHT OF WAY COSTS – Witness John Kirkpatrick..... 18

IV. CONCLUSION AND RECOMMENDATIONS 20

STATEMENT OF QUALIFICATIONS..... 21

CERTIFICATE OF SERVICE..... 25

I. INTRODUCTION

In the Assigned Commissioner’s Scoping Memo and Ruling¹ the Commission requested additional testimony on

“5. Are the mitigation measures or project alternatives infeasible? (CEQA Guideline 15091(a)(3).) This issue includes consideration of community values pursuant to Pub. Util. Code § 1002(a)(1).

6. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative? (CEQA Guideline § 15093.)

...
8. Is the proposed project and/or project alternative designed in compliance with the Commission’s policies governing the mitigation of EMF effects using low-cost and no-cost measures? (GO 131-D, Part X.)

9. If a certificate is granted, what is the maximum cost of the approved project? (Pub. Util. Code § 1005.5(a).)” (Scoping Memo, pg. 4)

The PACE (Protect Agriculture Communities Environment) opening testimony addresses (5) mitigation measures, (6) unavoidable impacts, and (9) the cost of an approved project².

II. ALTERNATIVE 3A REROUTE AROUND THE STONE CORRAL ECOLOGICAL RESERVE COST IMPACTS – Witness Hank Zaininger

Section 5 of the draft Environmental Impact Report³ compares the San Joaquin Cross Valley Loop (SJXVL) project alternatives. In Section 5.3, p.5-7, the report states that Alternative 3 results in the least impacts on agricultural resources, but due to unmitigable impacts to biological resources Alternative 3 would not be environmentally superior. Further, the report states that the EIR team looked for a feasible alignment (reroute) for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological

O16-4

¹ Dated June 23, 2009.

² The Scoping Memo orders, on page 7: “Issue No. 9: Edison has provided prepared testimony on the cost of its proposed project and Alternatives 2 and 3. We direct Edison to serve this prepared testimony pursuant to the schedule set forth in this ruling, and to provide additional prepared direct testimony setting forth its cost estimate for Alternative 6, taking into account the limitations presented by the schedule set forth in this ruling. Any party to the proceeding (see Rule 1.4) may offer prepared rebuttal testimony on this issue.” Rather than wait for rebuttal testimony, which would have hampered other parties ability to respond, we are providing this testimony in our opening comments.

³ Southern California Edison’s San Joaquin Cross Valley Loop 220 kV Transmission line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, June 2009.

Reserve⁴. However, they could not find a feasible reroute due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the reserve. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided through rerouting, Alternative 2 was selected as the environmentally superior route.

This testimony summarizes the results of my independent investigation into finding a preliminary feasible reroute of Alternative 3 to bypass the Stone Corral Ecological Reserve and its impact on the cost of the proposed project. In summary, the results of this preliminary investigation are Alternative 3 is modified slightly to reroute the new double circuit San Joaquin Cross Valley Loop transmission line around the Stone Corral Ecological Reserve, avoid construction within the ecological reserve, and avoid disturbing the two existing Big Creek – Rector 220 kV transmission lines crossing within the ecological reserve⁵.

Figure 4.4-4 in Section 4 of the draft Environmental Impact Report shows the location of the Stone Corral Ecological Reserve and generally defines designated critical habitat in the vicinity. The proposed Alternative 3A reroute path is shown in Figure 1. Figure 2 shows a closer view of the Stone Corral Ecological Reserve and surrounding area with the ecological reserve area outlined in blue, the existing Big Creek – Rector 220 kV transmission lines path across the ecological reserve marked in white, and the proposed preliminary Alternative 3A reroute path around the ecological reserve marked in yellow.

O16-4
cont.

⁴ PACE representatives called the CPUC Environmental Project Manager, on June 26, 2009 to request backup data to support the above statements in the draft Environmental Impact Report. He did not have any further backup information available describing the potential reroutes studied.
⁵ Called Route 3A in this testimony.



O16-4
cont.

Figure 1. Alternative 3A Reroute to Bypass the Stone Corral Ecological Reserve



Figure 2. Closer view of Stone Corral Ecological Reserve area outlined in blue, existing line path shown in white, and proposed preliminary Alternative 3A reroute shown in yellow.

O16-4
cont.

For the preliminary Alternative 3A reroute, the new double circuit 220 kV San Joaquin cross valley loop transmission line leaves the existing Big Creek – Rector 220 kV transmission lines right of way South of Avenue 376 approximately 11.6 miles north of the Rector Substation. First, the line proceeds easterly approximately 1200 feet through existing newly planted orchard. Second, the line proceeds northeasterly approximately 4400 feet through previously cultivated fields, which apparently are private property, to a point about 50 feet east of Road 152 and about 1250 feet South of Avenue 384. Third, the line proceeds north approximately 2400 feet through a previously cultivated field, which apparently is private property, across Avenue 384 and through an orchard to an abandoned railroad right of way. Fourth, the line proceeds northwesterly approximately 4100 feet along the abandoned railroad right of way to a point about 50 feet east of the existing Big Creek – Rector 220 kV transmission lines and north of the ecological reserve. Fifth, the line then proceeds north adjacent to the existing Big Creek – Rector 220 kV transmission lines to the point of intersection approximately 14.6 miles north of the Rector Substation, where the new line proceeds easterly and crosses Stokes Mountain as before.

Preliminary tower spotting for the Alternative 3A reroute is shown in Figures 3 through 7. The preliminary tower spotting uses span lengths between structures similar to those used in the preliminary tower spotting for the alternative routes presented in Section 2 and Appendix C of the draft Environmental Impact Report. Figures 3 through 7 are black and white copies of Pages 18 through 22 of the Alternative 3 Road Story⁶ respectively with the Alternative 3A preliminary line reroute centerline, towers and poles marked in red. The new Alternative 3A reroute structures added to bypass the Stone Corral ecological reserve are labeled alphabetically to differentiate them from the existing Alternative 3 structures passing through the reserve.

Figure 3 shows Alternative 3A replacement pole structure #58 and new pole structure #58 replaced with dead end double circuit tower structures relocated South of Avenue 376. The two existing Big Creek – rector 220 kV lines will transition to double circuit configuration at the relocated replacement tower structure #58. The new double circuit San Joaquin cross valley loop transmission line exits the existing right of way, proceeding easterly to a new tower structure A. All construction associated with the placement of these towers, transitioning the existing Big Creek – rector lines to double circuit configuration, and conductor stringing will be located East of Road 144 and South of Avenue 376, which is outside the Stone Corral Ecological Reserve.

⁶ Southern California Edison's San Joaquin Cross Valley Loop 220 kV Transmission Line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, Appendix C, Section 2.



Figure 4. Alternative 3 Road Story, Page 19, with Reroute Marked in Red

O16-4
cont.

Figure 5 shows the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure G along the abandoned railroad right of way to the next point of intersection, tower structure K located adjacent to the existing Big Creek – Rector lines, using three tangent pole structures, H, I and J.

Figures 5, 6 and 7 show the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure K proceeding north adjacent to the existing Big creek – Rector lines to the next point of intersection, new tower structure #74, using seven tangent pole structures, #67 through #73. This tower spotting is similar to the preliminary Alternative 3 tower spotting, but located adjacent to the existing Big Creek – Rector 220 kV transmission lines, which will remain undisturbed.

Figures 3 through 7 also show that 24 Alternative 3 structures, replacement structures #59 through #74 and new structures #59 through #66, will not be needed if the proposed preliminary Alternative 3A reroute is employed. These changes are marked in green.

O16-4
cont.

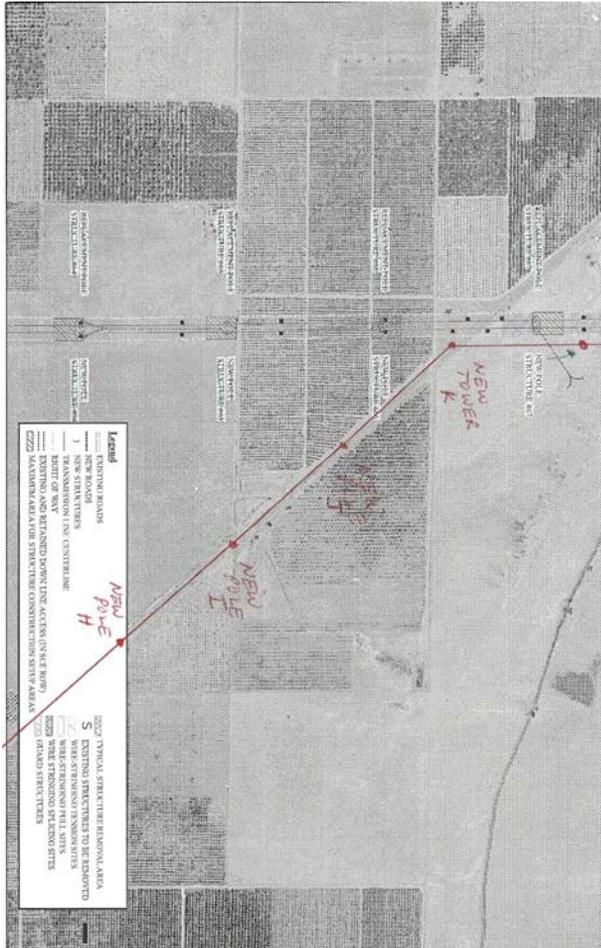


Figure 5. Alternative 3 Road Story, Page 20, with Reroute Marked in Red

O16-4
cont.

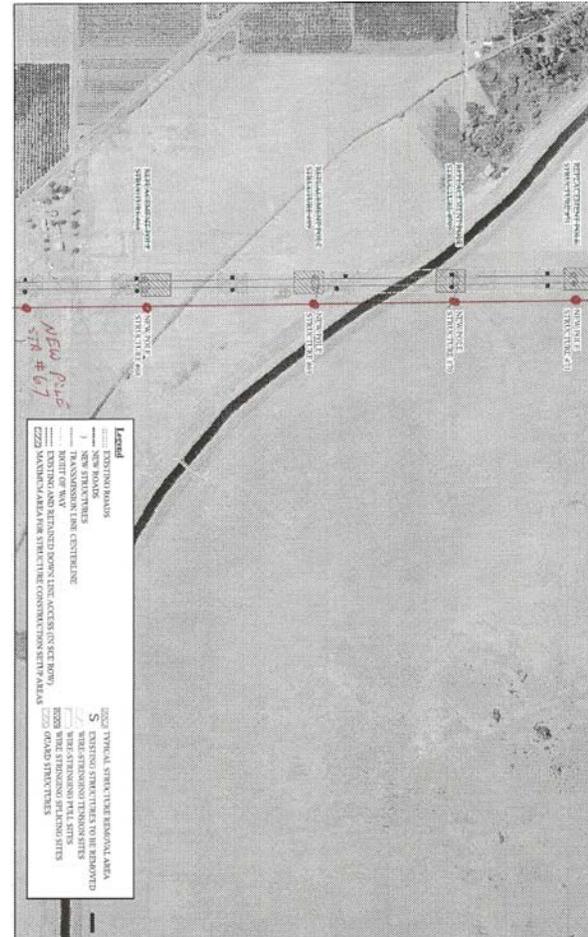


Figure 6. Alternative 3 Road Story, Page 21, with Reroute Marked in Red

O16-4
cont.

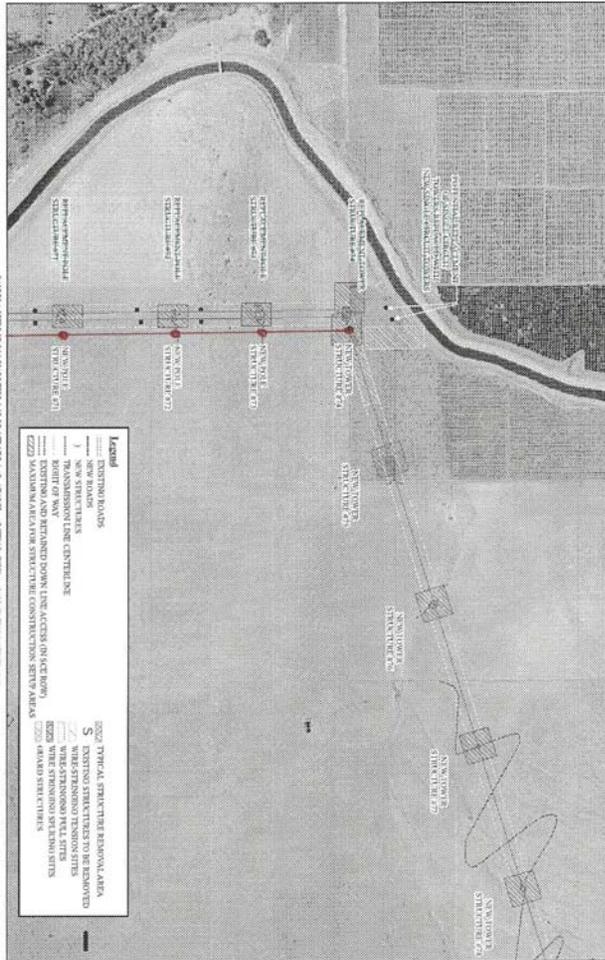


Figure 7. Alternative 3 Road Story, Page 22, with Reroute Marked in Red

O16-4
 cont.

The Alternative 3A reroute, modified to include the reroute of the new cross valley loop transmission line around the Stone Corral Ecological Reserve, results in the following incremental impacts on line mileage and right of way requirements:

- The total Alternative 3A reroute transmission line mileage increases about 0.5 miles from 24.3 miles to 24.8 miles.
- The Alternative 3A reroute requires rebuilding approximately 11.6 miles vs. 14.6 miles of existing Rector – Big Creek 220 kV transmission line right of way.
- For the Alternative 3A reroute, approximately 1.2 miles of existing Rector – Big Creek 220 kV transmission line right of way needs to be widened north of the Stone Corral Ecological Reserve, where the new cross valley loop transmission line is located adjacent to the existing Rector – Big Creek 220 kV transmission lines.
- For the Alternative 3A reroute, about 12 miles vs. 9.7 miles of new right of way needs to be acquired.

The Alternative 3A reroute, modified to include the reroute of the new cross valley loop transmission line around the Stone Corral Ecological Reserve, results in the following incremental impacts on construction requirements:

- Demolition of 11.6 miles vs. 14.6 miles of existing Big Creek 3 – Rector transmission line.
- Demolition of 11.6 miles vs. 14.6 miles of existing Big Creek 1 – Rector transmission line.
- Construction of 11.6 miles vs. 14.6 miles of new Big Creek 3 – Rector and Big Creek 1 – Rector double circuit transmission line on existing right of way.
- Construction of 11.6 miles vs. 14.6 miles of new Cross Valley Loop double circuit transmission line on existing right of way.
- Construction of 12 miles vs. 9.7 miles of new Cross Valley Loop double circuit transmission line on new right of way.
- Construction of 1.2 miles of new Cross Valley Loop double circuit transmission line adjacent to existing right of way.

The Alternative 3A reroute, modified to include the reroute of the new San Joaquin Cross Valley Loop (SJXVL) 220 kV transmission line around the Stone Corral Ecological Reserve, is expected to

O16-4
 cont.

result in the following approximate incremental impacts on Alternative 3 direct costs with contingency presented in Appendix A of SCE’s cost support testimony⁷:

Table 1. Cost Impact of Route 3A Reroute Around Stone Corral

Line No.	Alternative 3 Cost \$1000	Alternative 3A Reroute Cost \$1000	Cost Change \$1000
10	10,620	8,690	-1,930
11	43,465	30,200	-13,265
12	68,380	69,800	1,420
Total			-13,775

In Line 10 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to remove 14.6 miles of existing Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$10,620,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 10 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 removal cost of \$8,090,000 in Line 6 of Appendix A.

In Line 11 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to build 14.6 miles of new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$43,465,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further north than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 11 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line rebuild cost of \$28,140,000 in Line 7 of Appendix A.

In Line 12 of Appendix A of SCE’s cost support testimony, for Alternative 3A, the estimated cost to build 24.3 miles of new double circuit 220 kV transmission line is \$68,380,000. For the Alternative 3A reroute, the new SJXVL transmission line is about 0.5 miles longer. So Line 12 for the Alternative 3A reroute in Table 1 is assumed to cost about 24.8/24.3 times the corresponding Alternative 3 new double circuit SJXVL transmission line cost in Line 12 of Appendix A.

⁷ Southern California Edison Company’s Testimony on San Joaquin Cross-Valley Loop Project (SJXVL) Cost Support for SJXVL Project and Alternatives, Frank Harris, June 26, 2008.

These Line 10, 11 and 12 incremental direct cost changes for the Alternative 3A reroute result in expected total direct cost savings with contingency of about \$13,775,000 compared to Alternative 3 original estimates.

Assuming a P&B and A&G rate of 7.5% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting total direct plus contingency plus P&B and A&G cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$14,800,000. In addition, assuming an AFUDC rate of 12.6% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting AFUDC cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$1,900,000.

On July 13, 2009, members of PACE, David Cairns and Carol Cairns, and Phyllis Coring (consultant) and I met with two representatives of the California Department of Fish and Game, Justin Sloan, Environmental Scientist responsible for the Stone Corral Ecological Reserve, and his supervisor, Annee Ferranti, Senior Environmental Scientist, to discuss the feasibility of rerouting Alternative 3 around the ecological reserve. We discussed the proposed preliminary Alternative 3A reroute around the ecological reserve described above. In summary their opinion was that it will be feasible to reroute Alternative 3A around the Stone Corral Ecological Reserve on private property. There is critical habitat only in some spots in the previously cultivated fields outside the ecological reserve. These areas can be specifically identified with a biological survey, and the preliminary Alternative 3A reroute transmission structures relocated appropriately to avoid these areas.

Summing up, this preliminary Alternative 3A reroute bypasses the Stone Corral Ecological Reserve by crossing a small amount of orchards, crossing previously cultivated fields, which apparently are private property, utilizing an abandoned railroad right of way, and avoiding residential structures. This Alternative 3A reroute will mitigate the impacts to the sensitive habitat located within the Stone Corral Ecological Reserve described in the draft Environmental Impact Report. The Alternative 3A reroute also provides the flexibility to adjust structure locations to appropriately mitigate any identified biological resources in sensitive habitat located on private property outside the ecological reserve on the alternative 3A reroute path, while still resulting in the least amount of impacts to agricultural resources. This Alternative 3A reroute is feasible and it will significantly reduce the costs of constructing Alternative 3.

O16-4
 cont.

O16-4
 cont.

Applying a realistic value for the different land costs under Route 3 reduces the cost of Route 3 by \$3,900,000 in direct costs for a total route cost reduction of \$4,700,000¹¹.

↑
O16-5
cont.

IV. CONCLUSION AND RECOMMENDATIONS

PACE testimony in this proceeding identifies a route around the “unmitigatable” impacts to biological resources of Alternative 3. This adjustment reduces the cost of Route 3 over what SCE originally proffered. A further adjustment to Route 3 costs by using realistic land values reduces Route 3As costs even more. Route 3A, with the adjustments described in this testimony, should be the Commissions preferred route.

Respectfully submitted,



By: **Lon W. House, Ph.D.**
Representing PACE
(Protect Agriculture Communities Environment)

4901 Flying C Rd.
Cameron Park, CA 95682
Telephone: (530) 676-8956
Facsimile: (530) 676-8947
E-mail: lwhouse@innercite.com

Date: July 20, 2009

¹¹ Assuming a contingency rate of 31.51% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, direct cost savings plus contingency savings is about \$3,900,000 for the Alternative 3A reroute compared to Alternative 3. Assuming a P&B and A&G rate of 7.5% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting total direct plus contingency plus P&B and A&G cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$4,200,000. In addition, assuming an AFUDC rate of 12.6% similar to the rate used in Appendix A of SCE’s cost support testimony for Alternative 3, the resulting AFUDC cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$4,700,000.

STATEMENT OF QUALIFICATIONS

Hank Zaininger

Mr. Zaininger founded Zaininger Engineering Company (ZECO) in 1978. Over the past 31 years he has successfully performed numerous electric utility generation, transmission and distribution system technical and economic assessment studies. He has performed T&D system impact studies with new generation or other T&D facilities installed, including load flow, stability, and post transient voltage and reactive margin assessments as appropriate. He has performed innovative electric power system assessments of a broad range of advanced energy technologies, including solar, wind and biogas renewable resources, energy storage, distributed generation and end use technologies. He has investigated distributed generation interconnection requirements, power quality impacts and potential benefits of distributed resources when integrated into distribution systems. He has investigated requirements to enhance intermittent renewable resource benefits for applications in competitive electric utility system markets. He has determined relative SO₂, NO_x, CO₂ and other emissions for both central stations, distributed generation and end use technology alternatives. He has investigated electromagnetic pulse interaction and coupling with electric power systems. He has provided expert witness services in the both the transmission and distribution system areas.

Mr. Zaininger was employed by Power Technologies, Inc. for a total of seven years. He was employed by PTI for three years from 1973 to 1976 prior to forming ZECO, returned for two years from 1987 to 1989 to assist in the start up of the Sacramento office, and returned to PTI to serve as manager of the Sacramento office for two years from 1997 to 1999. At PTI, he undertook assignments in both transmission and distribution system planning and line design areas. He evaluated interconnection requirements, assessed transmission reliability and performed power transfer capability studies for interconnecting new generation additions. He served as an expert witness in cases involving large-scale generation connected to a transmission system and small-scale generation connected to a distribution system, developing testimony based on performing T&D system planning studies as appropriate. He developed the initial version of PTI’s transmission line optimization program, LOP1, and performed several EHV line design optimization studies with this methodology. He developed synthetic generation and transmission systems and data for evaluating advanced technologies and new energy resources, and performed several technical and economic assessments of advanced energy technologies and distributed generation, including battery storage and wind generation.

Mr. Zaininger was employed by the Electric Power Research Institute for one year in 1977. At EPRI, he participated in technical and economic cost/benefit assessments of a wide range of new energy technologies, and played a significant role in developing the initial version of the EPRI Technical Assessment Guide.

Mr. Zaininger was employed by Illinois Power Company for five years from 1969 to 1973. At IP, he served as a system planner, where he performed transmission and distribution system planning studies involving load flow, transient stability, and economic considerations. He was then assigned generation planning responsibilities for the company, where he performed generation planning studies leading to the

announcement of two generating units currently on line. These generation planning studies involved reliability assessment, production costing, economic and financial evaluation, future plant siting, and environmental impact assessment of new generation alternatives. In addition he served as a transmission line design engineer, where he developed complete design specifications for several transmission lines, and developed a new computerized method of structural analysis for both wood and steel transmission structures.

Mr. Zaininger was employed by Bell Telephone Laboratories for one year in 1968 as a member of the technical staff. At Bell Labs, he performed computer program development and determined system requirements for computerized telephone electronic switching stations, commonly employed today.

Mr. Zaininger received his degree in Electrical Engineering from the University of Illinois in 1968 where he was elected into Eta Kappa Nu. He is a senior member of the IEEE. Until recently he served as Chairman of the IEEE-PES Power System Analysis, Computing and Economics Committee. He is a Registered Professional Engineer in the State of Illinois. He has authored 58 technical publications and has been awarded a patent for the invention of a solar water heating teaching aid.

Henry W. Zaininger Expert Witness Experience

The following selected projects and experience highlight Mr. Zaininger's expert witness credentials.

Assessment of Sunrise Powerlink CPCN Planning Process This project for the California Public Utilities Commission Division of Ratepayer Advocates (DRA). This project consisted of performing a review and assessment of the reasonableness of portions of the San Diego Gas & Electric (SDGE) Application for a Certificate of Public Convenience and Necessity (CPCN) for the proposed Sunrise Powerlink project, associated SDGE direct testimony, other documents supplied by or downloaded from SDGE and the California Independent System Operator (CAISO) web sites, and reviewing and analyzing issues in the Draft Environmental Impact Report / Environmental Impact Statement as directed. H.W. Zaininger prepared and presented testimony, including cross examination, in Phase 1 regarding alternative transmission expansion plans meeting local reliability needs, and in Phase 2 comparing the relative reliability of alternative Northern and Southern Sunrise Powerlink routes at California Public Utilities Commission hearings.

Assessment of Palo Verde – Devers #2 CPCN Planning Process This project for the California Public Utilities Commission Division of Ratepayer Advocates (DRA). This project consisted of performing a review and assessment of the reasonableness of portions of the SCE Application for a Certificate of Public Convenience and Necessity for the proposed Palo Verde - Devers #2 project (DPV2), associated SCE direct testimony and other documents supplied by SCE or downloaded WECC and CAISO web sites. H.W. Zaininger then prepared and presented testimony, including cross-examination, assessing the impact of DPV2 on import capability into California from the Southwest, and the reasonableness of SCE's specifications for DPV2 at a California Public Utilities Commission hearing.

Assessment of the Maine Power Connection Project This project for the Maine Public Utilities Commission (MPUC) consisted of a subcontract to Woodruff Expert Services. This project consisted of performing a review and assessment of transmission studies and other applicant supplied materials supporting the Maine Public Service Co. and the Central Maine Power Co. Application for a Certificate of

Public Convenience and Necessity for the proposed Maine Power Connection (MPC) project to enable interconnection of the Aroostook Wind Energy Project. H. W. Zaininger then presented his findings to MPUC staff.

Review of Transmission Plans in 2006 NPC and SPPC IRP's This project for the Nevada Office of the Attorney General Bureau of Consumer Protection (BCP) consisted of a subcontract to Woodruff Expert Services. ZECO's role consisted of reviewing Nevada Power Company (NPC) and Sierra Pacific Power Company (SPPC) 2006 Integrated Resource Plan filings and data requests and responses; preparing assessments of alternative North/South transmission intertie and other transmission expansion scenarios, as directed by the WES project manager.

CEC Transmission System Engineering Assistance This subcontract to Aspen Environmental Group, completed in December 2003 consisted of providing transmission system engineering services to the California Energy Commission staff to conduct application for certification review of proposed new power plants in both Northern and Southern California. ZECO provided transmission system engineering services to the CEC for the SMUD Cosumnes Power Plant Project, the Palomar Energy Project, the Roseville Energy Facility, the Rio Linda/Elverta Power Plant Project, the Colusa Power Project, and the East Altamont Energy Center. ZECO tasks include performing cursory transmission engineering review of alternative plant sites, performing load flow studies using the GE PSLF program, reviewing system impact studies, attending CEC workshops and hearings, and preparing preliminary and final transmission system engineering staff assessment testimony for several proposed power plants in California.

John Kirkpatrick

JOHN O. KIRKPATRICK, ARA Ret.
23114 Carson Avenue
Exeter, California 93221

John, 79, has a lifetime of agricultural experience through education, work history in banking and appraisal, through self employment in the appraisal and agricultural consulting fields and, in retirement, as a farm owner/operator. His appreciation for agriculture began at the age of 12, working on his family's citrus and olive operation in Lindsay, Tulare County. He is a graduate of the University of California at Davis, after which he served in the U.S. Military as a commissioned officer. In 1965, he began 13 years' employment as General Manager of a farm and ranch corporation in the Lemon Cove-Exeter area. Responsibilities included management of a Limited Public Utility irrigation ditch company.

Appraisal Experience & Qualifications

Kirkpatrick's appraisal career began at Security First National Bank in 1958, specializing in agricultural accounts throughout the San Joaquin Valley. He became the Assistant Vice President and Trust Real Estate Officer managing bank trust real estate properties in Central California.

He expanded his university education with specialized courses in banking and real estate appraisal from the American Society of Farm Managers and Rural Appraisers. He earned ASFM&RA's highest professional designation as an Accredited Rural Appraiser (ARA) in 1965. He went on to become a faculty member of ASFM&RA, teaching courses in rural appraisal, as well ethics and standards of practice throughout the United States. For 45 years he served in leadership positions, including the presidency, in the California Chapter of ASFM&RA.

Since 1983, he has maintained his own appraisal and consulting business, Kirkpatrick Ag Services.

During the course of Kirkpatrick's career, he served as an expert witness, Receiver, Referee and Trustee in Bankruptcy in California and Federal courts in agricultural cases involving water rights; crop, livestock and tree loss damages & liability ; as well as management practices before the Agricultural Labor Relations Board.

Kirkpatrick and his wife own and operate a 54-acre citrus and pomegranate property in Tulare County.

CERTIFICATE OF SERVICE

I, Lon W. House, certify that I have, on this date, served the OPENING TESTIMONY OF PACE (PROTECT AGRICULTURE COMMUNITIES ENVIRONMENT) by email and U.S. Mail (for parties without email and ALJ Yacknin) on the parties listed on the Service List (attached) for the proceeding in California Public Utilities Commission Docket No. A.08-05-039.

I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.

Executed on July 20, 2009 in Cameron Park, California.



Lon W. House



Comment Letter O17
RUDELL
COCHRAN
STANTON
SMITH
BIXLER &
WISEHART, LLP

Via Facsimile (415/896-0332)

Jensen Uchida
July 30, 2009
Page 2

ATTORNEYS AT LAW

July 30, 2009

Gary H. Ruddell
Richard H. Cochran
Glenn A. Stanton
D. Zackary Smith
Matthew W. Bixler
Derek P. Wischart

Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Re: Southern California Edison's San Joaquin Cross Valley
Loop Transmission project (application A-08-05-039, filed
May 30, 2008)

Dear Mr. Uchida:

Our law firm serves as General Counsel for the Kaweah Delta Water Conservation District ("Water Conservation District"). On behalf of our client, we are providing you with these written comments regarding the Draft Environmental Impact Report ("DEIR") prepared in connection with the above-referenced project.

By way of introduction, the Water Conservation District is a multi-county public agency, covering approximately 340,000 acres located in both Tulare County and Kings County. The Water Conservation District is entirely located on the alluvial fan distribution system of the Kaweah River. The Water Conservation District was organized in 1927 pursuant to the provisions of the Water Conservation Act of 1927, for the purpose of doing those things allowed by the Act. Among other things, the Water Conservation District has a contract with the United States for the repayment of project costs allocated to conservation and irrigation space in Lake Kaweah. Additionally, the Water Conservation District is involved in extensive flood control activities on the Kaweah River and its distributaries. In 1995, the Water Conservation District adopted a Groundwater Management Plan pursuant to the provisions of California Water Code §§10750, et. seq., which allow it to take affirmative action to protect and replenish the overdrafted groundwater basin located within its boundaries.

1102 N. Chinoweth St.
Visalia, CA 93291-4113

Telephone:
559.733.5770

Facsimile:
559.733.4922

Email:
rcssbw@visaliaalaw.com

("Proposed Project.") While the Water Conservation District reserves the right to join in any and all objections made by any person or entity with respect to the DEIR, it specifically objects to portions of the DEIR as hereinafter set forth.

First, the Water Conservation District objects to the statements made in the paragraph at the end of page 4.4-20 and beginning of 4.4-21 as inaccurate. The statements provide as follows:

There are no active or approved HCPs in the Proposed Project area or near any of the project alternatives. The Kaweah Delta Water Conservation District (District) is in the initial organization and planning stages of proposing several conservation plans in northwestern Tulare County. The Proposed Project would traverse one or more areas that the District is reviewing as a potential restoration sites. Because there are no adopted HCPs near the Proposed Project or project alternatives they are not considered further in this EIR.

The Water Conservation District is not "in the initial organization and planning stages of proposing several conservation plans in northwestern Tulare County." In fact, the Water Conservation District has been actively preparing a single Habitat Conservation Plan and a Natural Communities Conservation Plan ("HCP/NCCP") for nearly 15 years. The HCP/NCCP is being developed by the Water Conservation District to cover its channel maintenance operations and capital projects over an approximate 20 year planning horizon. To this end, the Water Conservation District acquired several of the few remaining local parcels of real property that exhibit characteristics that might help it meet its objectives. Those acquisitions include the following:

1. On **November 15, 2000**, the Water Conservation District acquired the Hannah Ranch South Property (hereinafter referred to as "Hannah Ranch South Property") for **\$1,520,000**. It consists of 383.64 acres, with its northerly boundary, perhaps its longest boundary, extending into the Lower Kaweah River for a distance of more than one mile. It is a prime and unique location to be developed for riparian restoration and enhancement.
2. On **December 14, 2001**, the Water Conservation District purchased the Paregien Property (hereinafter referred to as

O17-1

"Paregien Property") for \$500,000. The purchase included certain rights to develop and utilize adjacent property, as well. The Paregien Property consists of approximately 70.00 acres, located just across State Route 198 from the Kaweah Oaks Preserve. Deep Creek, a natural channel and distributary of the Lower Kaweah River, runs across the Paregien Property for more than one-half mile. Outside Creek runs across a parcel located immediately to the east of the Paregien Property. The Paregien Property includes a riparian corridor and a Valley Oak grassland community. Portions of it are undeveloped and appear to be in a natural state. Integration of an adjacent parcel containing the historic alignment of Cameron Creek has occurred based on actions of the Water Conservation District.

Both the Paregien Property and the Hannah Ranch South Property offer significant opportunities for habitat protection, restoration and enhancement within the Kaweah River Corridor between Terminus Dam and the City of Visalia, an area in which native habitats have been heavily disturbed by agriculture and development. Riparian and Valley Oak woodlands, Savannahs and wetlands represent extremely valuable habitats in the San Joaquin Valley. These habitats support diverse wildlife communities, including threatened and endangered species, as well as a number of species of special concern. Yet, these habitats have been substantially reduced throughout the Central Valley. Thus, resource agencies and conservation organizations are actively involved in attempting to reduce and mitigate for impacts to these habitats and support restoration of the habitats associated with these natural communities, wherever locations and land availability allow. In addition to providing opportunities to protect and restore sensitive animal and plant communities, which will add to the overall health and recovery extent of special status species in the region, the protection and restoration of both the Paregien Property and the Hannah Ranch South Property will increase the connectivity of habitats along the Kaweah River Corridor. As habitat patchiness decreases and extent and connectivity of habitats increase, the overall functions and values of those habitats increase. Thus, there is ecological value in protecting and restoring individual habitat sites and cumulative value in preserving several sites within a large degraded river corridor. Specifically, the Hannah Ranch South Property may be developed for riparian restoration and enhancement and the Paregien Property developed for Valley Oak Savannahs or woodland, and for grassland

O17-1
cont.

protection and restoration. Together, these two sites are intended to be a vital part of the Water Conservation District's HCP/NCCP "package."

From the foregoing, it should be obvious that the Water Conservation District long ago passed "the initial organization and planning stages of" its HCP/NCCP. It has spent millions of dollars in land acquisitions and hundreds of thousands of dollars in consulting fees in the work. Therefore, the DEIR substantially understates the Water Conservation District's work on its HCP/NCCP.

In another understatement, the DEIR, at p.4.4-21, says that the "[p]roposed Project would traverse one or more areas that the District is reviewing as a potential restoration sites." As set forth in the foregoing paragraphs, there are two specific sites that will be crossed by the Proposed Project. The Water Conservation District has previously met with Southern California Edison, identified the sites, and reviewed with it the work done and to be done on both sites. There should not be any equivocation as to the number of sites that will be crossed by the Proposed Project. Southern California Edison clearly knows that there are two sites and not merely one. Further, Southern California Edison knows that the Water Conservation District is not merely reviewing the sites, but that the Water Conservation District has spent millions of dollars to purchase them and place them in its HCP/NCCP package.

Since the Water Conservation District has spent substantial time with Southern California Edison personnel about the impact of the Proposed Project to the two aforementioned sites, it is quite perplexed as to why Southern California Edison would downplay the Water Conservation District's plans for both sites. The DEIR does not adequately disclose the facts and other information available to Southern California Edison with respect to both sites.

Second, the Water Conservation District comments that the DEIR does not adequately deal with the legal inability of Southern California Edison to acquire by condemnation property rights on the Water Conservation District's aforementioned parcels. Paragraph (b) of California Code of Civil Procedure §1240.650 provides that "[w]here property has been appropriated to public use by a public entity, the use thereof by the public entity is a more necessary use than any use to which such property might be put by any person other than a public entity." Thus, **under California Code of Civil Procedure §1240.650(b), the ownership and use of the Paregien Property by the Water Conservation District is deemed to be more necessary than any use by**

O17-1
cont.

O17-2

O17-3

Comment Letter O17
RUDELL
COCHRAN
STANTON
SMITH
BIXLER &
WISEHART, LLP

Jensen Uchida
July 30, 2009
Page 5

Southern California Edison, which is not a public entity. The Water Conservation District notes that the DEIR fails to consider the legal inability of Southern California Edison to condemn the necessary easements across the Water Conservation District's parcels as will be required for the Proposed Project to go forward as described in the DEIR. The Water Conservation District's ownership absolutely precludes Southern California Edison's proposed 100 foot wide utility right-of-way over either the Paregien Property or the Hannah Ranch South Property.

O17-3
cont.

Third, the Water Conservation District comments that the DEIR fails to disclose that the right-of-way contemplated by the Proposed Project is not compatible with the HCP/NCCP planned for the two aforementioned Water Conservation District parcels. An HCP/NCCP encourages habitat for listed species of plants and animals. Situating the double-circuit 220kV transmission line contemplated by the Proposed Project on the aforementioned parcels would not be consistent with the HCP/NCCP. In fact, **locating the aforementioned lines on the parcels would entirely eliminate their value in the Water Conservation District's HCP/NCCP.** Further, even locating the proposed lines anywhere within one mile of the aforementioned parcels would likely eliminate their value to the Water Conservation District as part of its HCP/NCCP.

O17-4

Kindly consider the foregoing comments and modify the DEIR and the Proposed Project accordingly. Of course, my client remains available to discuss this matter further with Southern California Edison, should it desire to do so.

Sincerely,

RUDELL, COCHRAN, STANTON,
SMITH, BIXLER & WISEHART, LLP

By 
D. Zachary Smith

DZS/jk
22816



Memorandum

Date: July 31, 2009
To: Doug Carman, Paramount Citrus Project: 14180.001
From: David Bean, PG, CHg cc:

Subject: Potential Groundwater Impacts from Proposed Southern California Edison San Joaquin Cross Valley Loop Alternative Routes 2 and 6

As requested by James Jordan of Paramount Citrus (Paramount), AMEC Geomatrix, Inc. (AMEC), has reviewed the Southern California Edison Draft Environmental Impact Report (DEIR) for the proposed San Joaquin Cross Valley Loop. In particular, AMEC focused on potential impacts to groundwater resulting from installation of high voltage electrical power towers and associated transmission lines, pads and roads along Alternative Routes 2 and 6 as presented in the DEIR (Figure 1).

Groundwater is the primary source of drinking water for most communities in California and the major source of irrigation water for most agricultural areas. In the Valley, groundwater is typically found in deep alluvial aquifers comprised of sand and gravel, and groundwater recharge is primarily from percolation of water from streams, rivers, and applied water. In the foothills on the east side of the Valley, groundwater is more typically found in fractured bedrock and groundwater recharge occurs through percolation of rain and snow melt through fractures in the bedrock. Although the western half of the new rights-of-way of Alternative Routes 2 and 6 overlie significant alluvial aquifers, the eastern half of Alternative Routes 2 and 6 are located in areas where groundwater is found primarily in fractured bedrock characteristic of the foothills, or in areas consisting of shallow alluvial aquifers over fractured bedrock.

Previous Investigations

In 2008, AMEC conducted an extensive survey of groundwater resources in the vicinity of Rayo Ranch on behalf of Paramount (AMEC, 2008). Project Alternative Routes 2 and 6 cut directly through this study area as they extend from the existing Big Creek 1-Rector/Big Creek 3-Rector 220 kilovolt (kV) transmission line right-of-way along Road 148 eastward into the foothills to connect to the existing Big Creek 3-Springville/Big Creek 4-Springville 220 kV transmission line (Figure 1).

O18-1

Groundwater beneath the Rayo Ranch area (located in the path of both Alternative Routes 2 and 6 west of Colvin Mountain) is found in a shallow alluvial aquifer overlying a fractured bedrock aquifer. The alluvial aquifer ranges from just a few tens of feet thick at the base of Colvin Mountain to approximately 250 to 300 feet thick near Road 148.

East of Colvin Mountain (where Alternative Routes 2 and 6 converge), groundwater beneath the Cottonwood Creek (Elderwood/Dutch Colony) and Antelope Valley (including Sentinel Butte)

AMEC Geomatrix, Inc.
1281 E. Alluvial Avenue, Suite 101
Fresno, California
USA 93720-2659
Tel (559) 264-2535
Fax (559) 264-7431
www.amecgeomatrixinc.com

AMEC Geomatrix



Memorandum
July 31, 2009
Page 2 of 6

area is also found in a shallow alluvial aquifer overlying a fractured bedrock aquifer. On this eastern portion of Alternative Routes 2 and 6 the alluvial aquifer ranges from just a few tens of feet thick to only a few feet thick at the base of the foothills.

The limited well construction data available for the Cottonwood Creek and Antelope Valley area indicate that the wells are relatively shallow and are completed in alluvial and fractured bedrock. Information provided by farmers in the area east of Colvin Mountain indicates that groundwater supply is extremely inconsistent. Wells in some areas have good yields while many wells that are drilled provide no usable water. This is consistent with the results of our surveys and, in our experience, is characteristic of the Sierra foothill region. Groundwater is not consistently available across the small alluvial-filled valleys. Some areas are underlain by fractured bedrock filled with water while other areas are underlain by dry fractures or fractures isolated from recharge areas so they do not have enough groundwater flow or storage to provide a long-term supply. Relocating a well, even a short distance in a fractured bedrock aquifer, can be very unpredictable.

Groundwater elevation data collected by the California Department of Water Resources (DWR) and the United States Geological Survey (USGS) were used to prepare long-term hydrographs from 1980 to 2007 for over 60 wells in the area (Figure 2). Some of our more important observations are:

- Groundwater elevations tend to vary seasonally 5 to 10 feet, rising in the wet winter months and falling in the dry summer months when wells are pumped for irrigation.
- Groundwater elevations also vary in response to decadal-scale drought cycles, rapidly declining 20 to 30 feet during drought periods and quickly recovering during wet periods.

The same groundwater elevation data were used to evaluate seasonal (Fall and Spring) groundwater flow patterns over 25 years. Some of our more important observations are:

- Groundwater flows generally from east to west from the foothills areas (i.e. Cottonwood Creek drainage and Antelope Valley) to the Valley trough west of Highway 99 (Figure 3).
- The groundwater gradient is consistent in direction and magnitude during both Fall and Spring and during wet and dry periods.

In the Cottonwood Creek drainage area there is a strong correlation between groundwater elevation data from DWR and USGS, stream flow data from the USGS, and precipitation data from the National Oceanographic and Atmospheric Administration (Figure 4). This indicates that the Cottonwood Creek drainage and Antelope Valley are very important groundwater recharge areas on the east side of the Valley.

The data also show a strong correlation between groundwater elevations wells in the Elderwood area, wells south of Colvin Mountain, and wells west of Colvin Mountain (Figure 2). This

O18-1
cont.



Memorandum
July 31, 2009
Page 3 of 6

indicates that the foothill area on the east side of the valley is an important recharge source for local wells, including those south and west of Colvin Mountain, and many square miles of productive farm land.

The data show that depth to groundwater has historically ranged from 10 to 80 feet below ground surface in the Elderwood area (Figure 5). However, as recently as 2007, depth to groundwater was between 10 and 40 feet, depending on location.

Our conclusion is that the local aquifer system is not laterally extensive and does not have diverse sources of recharge. The data indicate the local aquifer has a limited recharge area because the local effects are so quickly evident. The seasonal variation in groundwater elevations, the decline during drought periods and subsequent recovery during wet periods indicates that local recharge is extremely important to the local aquifer system. As a result, in this aquifer system even a small impairment of the local recharge capability can have a significantly adverse impact.

Potential Groundwater Impacts

At the request of Paramount, we have reviewed the DEIR with particular focus on the potential impacts Alternative Routes 2 and 6 may have on groundwater resources and the availability of agricultural irrigation supplies in the vicinity of the Rayo Ranch, the Elderwood area, and Antelope Valley.

As a result of this review, we believe the DEIR is deficient because it fails to adequately address potential significant adverse impacts to groundwater. These impacts result from the installation of power poles and service roads in several areas, particularly along the eastern alignments of Alternative Routes 2 and 6 in the Elderwood and Antelope Valley areas.

DEIR Pages 2-20 to 2-33 describe the poles, towers, and roads required for the project. Foundations for tubular power poles will be 6 to 10 feet in diameter and 20 to 60 feet deep. Groundwater is at a depth of 10 to 40 feet along much of the alignment. Dewatering may be necessary to construct foundations for as many as 38 poles. Dewatering in a limited aquifer system during a period of drought may adversely affect local water supply wells and may permanently damage the aquifer system through compaction and sealing of alluvial and fractured bedrock in the vicinity of the borings. In addition, once cemented in place, the foundations are likely to become permanent local barriers to recharge and groundwater flow in both alluvial and fractured bedrock. Because the transmission of groundwater through the fractured bedrock cannot accurately be mapped, the impact of pouring cement into the fractures intersected by an individual foundation cannot be predicted with any certainty. Once the concrete is poured and the impacts are known, however, they are very hard to reverse. It is likely that the concrete will cut off the downstream flow in the sealed fractures, or possibly redirect the water flowing in the sealed fractures to some other fracture or fracture system. Any wells relying on those sealed fractures will experience decreased flow or possibly a complete loss of flow. Because it is virtually impossible to determine the route water takes to a well, all wells in the vicinity of a new foundation must be considered at risk.

O18-1
cont.

O18-2



Memorandum
July 31, 2009
Page 4 of 6

DEIR Pages 3-10 to 3-12 describe Alternative Route 2 and indicate that new permanent roads will cover over about 28 acres of land. Approximately 5 acres of new road surface appear to be in the recharge areas of Elderwood area and Antelope Valley. These 5 acres of graded and compacted road may have an adverse impact on the rate water can recharge. As a result, more water may run off in rain events and may be lost to the aquifer. An additional 9 acres will be "permanently disturbed." The definition of "permanently disturbed" includes areas where other impervious surfaces are located. Therefore, these 9 acres may further reduce recharge capacity.

O18-3

DEIR Pages 4.8-4 to 5 and 4.8.14 describe the sediments beneath the Alternative Routes as consisting of "three stratigraphic units: continental deposits, older alluvium, and younger alluvium. For the most part, assessable groundwater occurs within an unconfined state throughout the study area." The DEIR also indicates "The groundwater basins underlying the study area are relatively large, predominantly unconfined, and heavily impacted by existing agricultural demands. Groundwater use is not proposed for the Proposed Project or alternative, and they would otherwise have negligible impact upon existing groundwater supplies and processes." These statements may be reasonable for the portion of the project on the Valley floor. However, the DEIR fails to consider the shallow alluvial and fractured bedrock aquifers at the base of the foothills (i.e. the Elderwood area and Antelope Valley). As described above, the local aquifer system beneath this area is not laterally extensive and does not have diverse sources of recharge. This local aquifer system is also being put to extensive beneficial use for domestic and agricultural supply. Dewatering for foundations would exacerbate local overdraft during the current drought conditions, and installation of foundations may have significant impacts on groundwater supplies and processes by reducing recharge and disrupting groundwater flow.

O18-4

Particular Areas of Concern

DEIR Appendix C Pages 17-20 Alternative Route 2 – Structures 55-73 are located in the Rayo Ranch area east of Colvin Mountain. Along this alignment the shallow alluvium aquifer thins from a few hundred feet thick to only a few tens of feet thick. Approximately 2,700 feet of new roads will be required to construct 20 structures. Installation of roads, pads, and power poles may reduce recharge potential and, as discussed above, create barriers to groundwater flow by sealing fractures, especially on the eastern end of the alignment. Available data suggest a significant amount of groundwater flow occurs through fractures and into the alluvium in this area, so the concrete foundations can potentially block a significant amount of the flow, which would adversely affecting wells required to irrigate local farms.

O18-5

DEIR Appendix C Pages 20-21 Alternative Route 2 – Structures 74-78 are located on the west side of Colvin Mountain overlying a primarily fractured bedrock aquifer. Approximately 2,100 feet of new roads will be required to construct 4 structures. Installation of roads, pads, and power poles may reduce recharge potential and create barriers to groundwater flow by sealing bedrock fractures. Available data suggest a significant amount of groundwater flow occurs through fractures in this area, so if concrete foundations are installed in the fractured



Memorandum
July 31, 2009
Page 5 of 6

bedrock aquifer it is likely that they will inhibit a significant amount of groundwater flowing west into the Rayo Ranch area.

DEIR Appendix C Pages 21-23 Alternative Route 2 – Structures 78-91 are located in Mud Springs Gap along the north of Colvin Mountain. This is an area of shallow alluvium overlying fractured bedrock. Approximately 4,000 feet of new roads will be required to construct 13 structures. Installation of roads, pads, and power poles may reduce recharge potential and create barriers to groundwater flow by sealing fractures. Available data suggest a significant amount of groundwater flow occurs through fractures in this area, so if concrete foundations are installed in the fractured bedrock aquifer it is likely that they will inhibit a significant amount of groundwater flowing through the Mud Springs Gap and adversely affecting wells required to irrigate local farms. In this area it may not be possible to construct new wells that will effectively replace any impacted wells. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.

DEIR Appendix C Pages 23-25 Alternative Route 2 – Structures 92-100 are located in the Elderwood area. This is a significant recharge area when water is present in Cottonwood Creek. Structure 93 is located adjacent to the main channel of Cottonwood Creek. Installation of roads, pads, and power poles may reduce the recharge potential of the area and create barriers to groundwater flow in both alluvium and fractured bedrock. In addition, several water supply wells are located along this section of alignment. Wells located in the path of alignment will need to be relocated. As indicate above, the availability and location of groundwater in this area is unpredictable and difficult to determine, so relocating wells will likely be very challenging, expensive, and potentially impossible. The impediment to groundwater flow, especially in the bedrock, should be considered significant because there is no way to ensure that it does not cause adverse impacts. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.

O18-5 cont.

DEIR Appendix C Pages 25-27 Alternative Route 2 and Alternative Route 6 – Structures 101-115 are located in Sentinel Butte and Antelope Valley. This is a relatively undisturbed recharge area with several ephemeral streams. Approximately 6,500 feet of new roads will be required. Installation of roads, pads, and power poles may reduce the recharge potential of the area and create barriers to groundwater flow in the primarily fractured bedrock aquifer. Several water supply wells, including a high yield "wagon-wheel" or radial collector well, reportedly will need to be relocated along this section of alignment. A radial collector well has a large diameter central caisson with horizontal perforated pipes extending radially into a thin shallow aquifer. Typical radial collector wells now cost between \$3,000,000 and \$5,000,000 to construct. While it is possible to install a new radial collector well in this area, there is no guarantee that it will have the desired yield. As indicated above, the availability and location of groundwater in the Sentinel Butte/Antelope Valley area is unpredictable and difficult to determine, so relocating wells will likely be very challenging, expensive, and potentially impossible. The impediment to groundwater flow, especially in the bedrock, should be considered significant because there is no way to ensure that it does not cause adverse impacts. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.



Memorandum
 July 31, 2009
 Page 6 of 6

Conclusion

While the individual impact of certain individual structures on groundwater recharge in the Rayo Ranch, the Elderwood area, and Antelope Valley may be less than significant, the cumulative impacts of the roads, multiple pads, deep foundations and multiple structures on groundwater recharge cannot be so easily dismissed. The DEIR does not acknowledge or address the significant risk and negative impact that sealing of one bedrock fracture by a single concrete foundation in the Elderwood area and Antelope Valley can have on groundwater flow. Replacement of wells in this thin alluvial and fractured bedrock aquifer is difficult and costly.

In summary, the DEIR is deficient because of the following:

- The DEIR comparison of potential groundwater impacts from the various alternatives is deficient.
- The DEIR fails to acknowledge the risks of construction on groundwater recharge and resources in the foothill areas of Alternative Routes 2 and 6.
- The DEIR also fails to acknowledge the risks of construction of roads and foundations to existing water supply wells in the shallow alluvium and fractured bedrock aquifers beneath Alternative Routes 2 and 6.

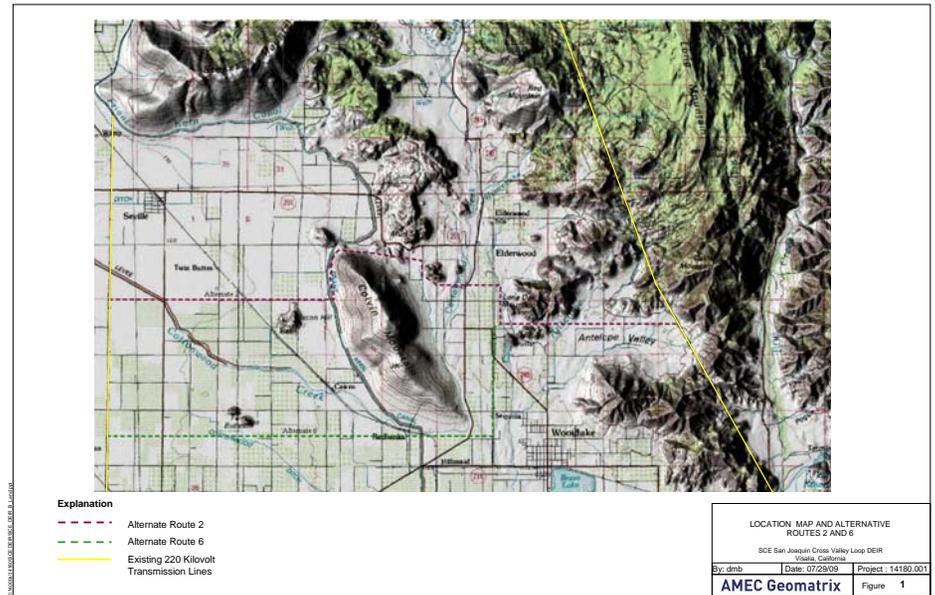
O18-6

Attachments: Figure 1 – Location Map and Alternative Routes 2 and 6
 Figure 2 – DWR Well Hydrographs
 Figure 3 – Water Surface Elevation – Spring 2007
 Figure 4 – Correlation between Precipitation, Stream Flow, and Groundwater Elevation in Cottonwood Creek Valley
 Figure 5 – Hydrographs of Selected Wells Showing Relationship between Groundwater in Cottonwood Creek Valley, Antelope Valley, and West of Colvin Mountain

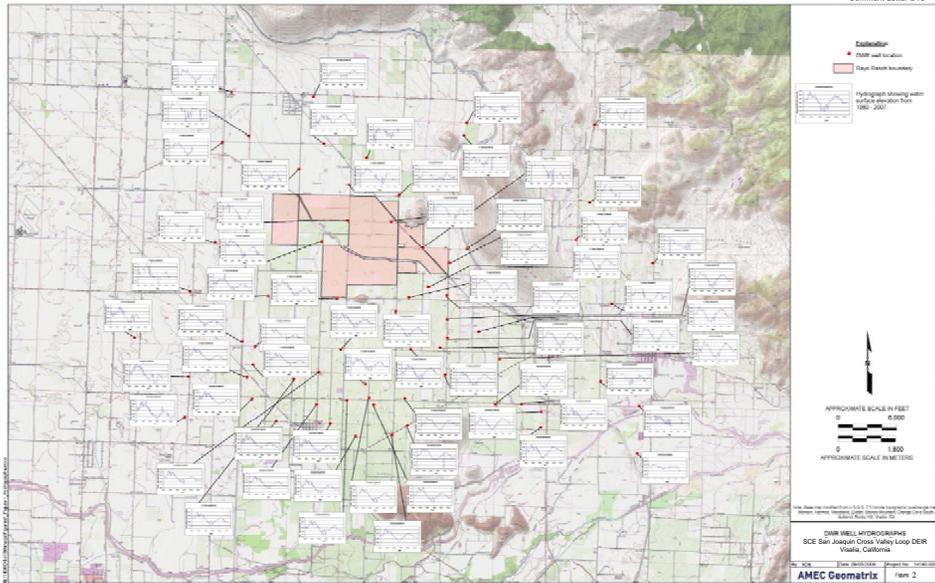
References

AMEC Geomatrix, Inc., 2008, Evaluation of Groundwater Resources, Paramount Citrus Rayo Ranch, Tulare County, California, November (AMEC, 2008).
 Croft, M.G. and Gordon, G.V, 1968, Geology, Hydrology, and Quality of Water in the Hanford-Visalia Area, San Joaquin Valley, California, USGS Open-File Report 68-67 (Croft and Gordon, 1968).

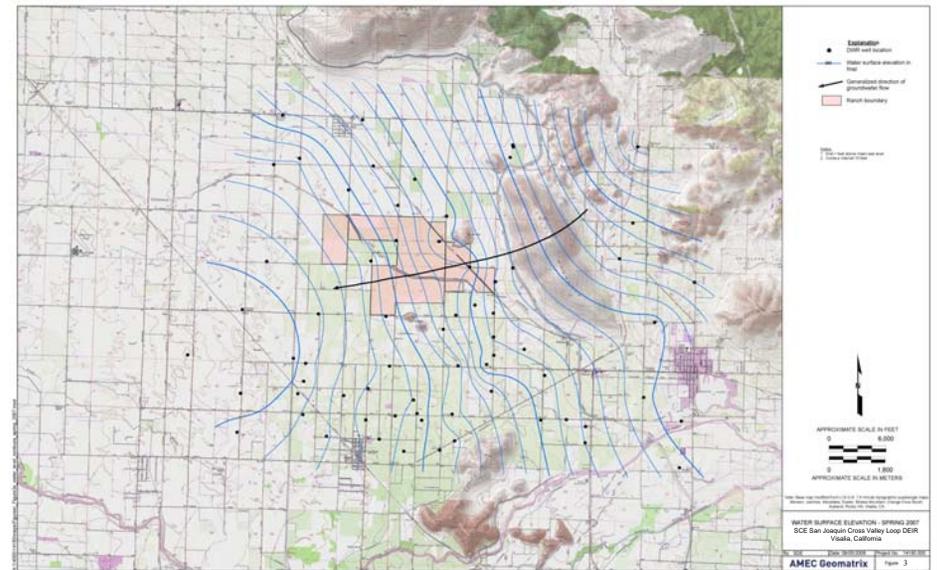
Comment Letter O18

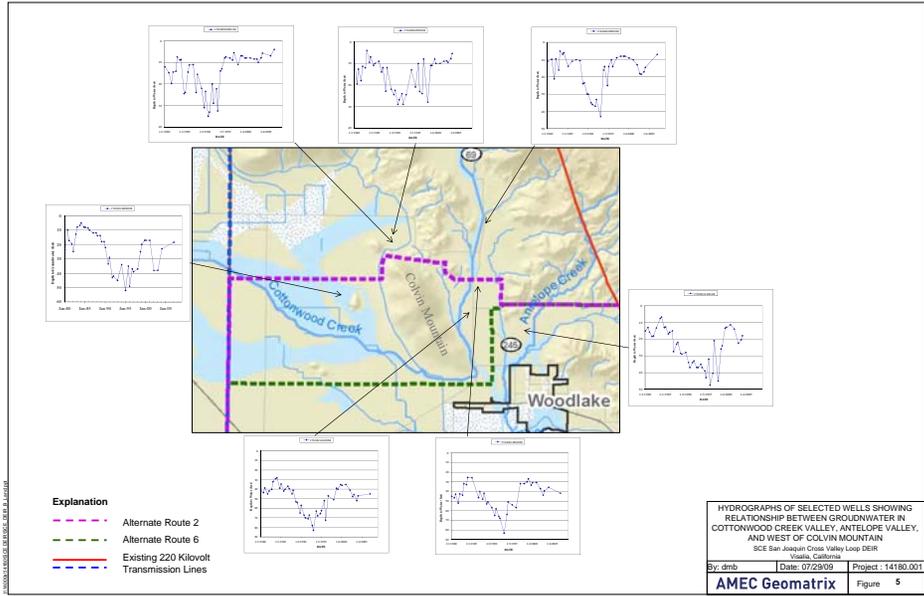
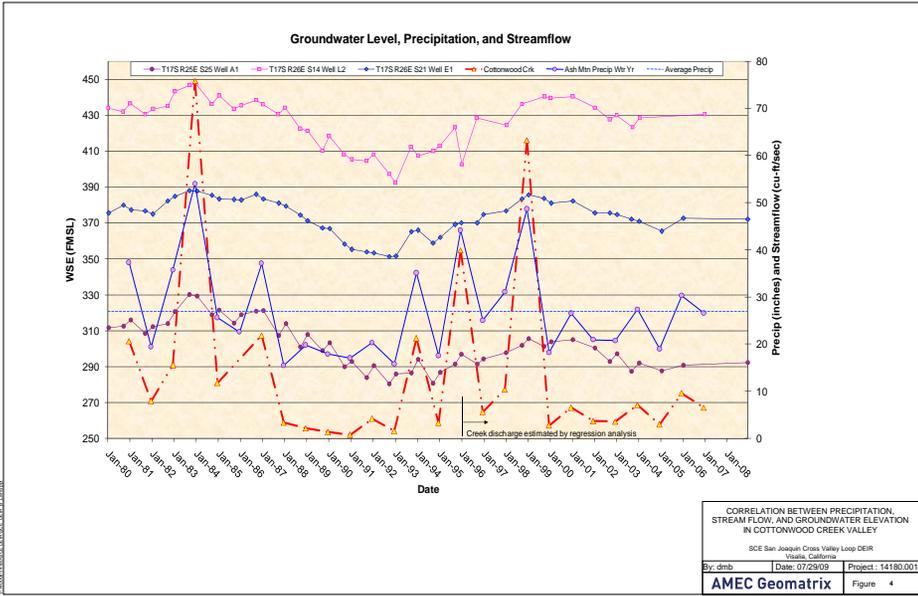


Comment Letter O18



Comment Letter O18





Baker Manock
& Jensen PC
ATTORNEYS AT LAW

July 31, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, California 94104-4207

Re: *San Joaquin Cross Valley Loop Transmission Project
(A. 08-05-039) Draft Environmental Impact Report*

Dear Mr. Uchida:

This comment letter is submitted on behalf of Paramount Citrus Association ("Paramount Citrus") in response to the San Joaquin Cross Valley Loop 220 kV Transmission Line Project Draft Environmental Impact Report ("DEIR") and request for public comment by the California Public Utilities Commission ("CPUC"). Paramount Citrus and its affiliates own significant agricultural acreage within the proposed Alternatives 1, 2, and 6 Right of Way ("ROW") described in the DEIR and will suffer significant adverse impacts if any of these alternatives are chosen.

The DEIR published by the California Public Utilities Commission concerns the Southern California Edison ("SCE") proposal to build a new two circuit 220kV line with associated poles and lattice towers and additional appurtenant equipment connecting the existing Big Creek 4-Springville transmission line to the existing Rector substation near Visalia (the "Project"). The DEIR indicates that the Project is needed to increase transmission capacity to meet the peak power needs of the Visalia area.

The CPUC received a wide variety of comments concerning the DEIR at the July 23, 2009 public meeting held in Visalia (the "Public Meeting"). Paramount Citrus Vice President Doug Carman spoke at the Public Meeting and provided a written copy of his expanded comments. These comments supplement the comments made by Mr. Carman at the Public Meeting.

The comments of the approximately 50 speakers at the Public Meeting were extremely consistent in advocating for a specific alternative. This is in distinct contrast to the majority of public meetings concerning Environmental Impact Reports ("EIRs"). Generally competing groups argue from very different perspectives about the proposed project and its alternatives. This presents the rare instance where a draft EIR causes an entire community – consisting of

Christopher L. Campbell
Attorney at Law
ccampbell@bakermanock.com

Fig Garden Financial Center
5260 North Palm Avenue
Fourth Floor
Fresno, California 93704
Tel: 559.432.9400
Fax: 559.432.5620
www.bakermanock.com

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 2

farmers, businesses and environmentalists – to coalesce around a single alternative that they all find acceptable. The local community is primarily concerned that construction of the proposed transmission lines on either the proposed route (Alternative 1) or Alternatives 2 or 6, which will travel through highly productive existing agriculture, will have devastating economic impacts upon an area that is already struggling with a variety of economic difficulties. In addition, Alternatives 2 and 6 traverse an extremely valuable local historical and recreational area. Finally, and perhaps most importantly, approximately the eastern half of Alternatives 2 and 6 is an important citrus growing area that is dependent upon groundwater from a limited and unpredictable fractured rock system. The disruption caused by transmission line construction could significantly alter the course of groundwater, thereby damaging wells and depriving existing orchards, homes and communities of vital irrigation water.

The route labeled Alternative 3 in the DEIR is the basis for the community agreement; however, certain members of the community also believe that an additional mitigation measure should be introduced to ensure that Alternative 3 does not damage the Stone Corral Ecological Reserve. For the purpose of these comments, we will refer to Alternative 3 with the proposed additional mitigation as Alternative 3a.

Paramount Citrus encourages the CPUC to determine that Alternatives 1, 2 and 6 are not feasible due to their significant impacts that cannot be addressed by any available mitigation. Paramount Citrus encourages the CPUC to select Alternative 3 or 3a as the environmentally superior alternative for the reasons set forth below.

REQUIREMENTS FOR A DRAFT ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act ("CEQA") requires the preparation of an Environmental Impact Report ("EIR") whenever there is substantial evidence that a proposed project may produce significant environmental effects. (Pub. Resources Code, Section 21080). The contents of the EIR and the process for review of the EIR are set forth in the CEQA Guidelines that have been adopted by the legislature and have the force of law. They are found in the California Code of Regulations, Title 14, Division 6, Chapter 3 Sections 15000-15387 and Appendices A-K. They will be cited in these comments as "CEQA Guidelines."

The Draft EIR is an informational document to assist the public and the decision makers to understand the impacts of a proposed project. The statute states generally that "the purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a

O19-1
cont.

O19-1

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop
 Transmission Project
 July 31, 2009
 Page 3

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop
 Transmission Project
 July 31, 2009
 Page 4

project.”¹ Substantively, an EIR must include, among other things, a brief summary of the proposed project and its consequences; a discussion of the inconsistencies between the proposed project and applicable general and/or regional plans; a description of the significant environmental effects of the proposed project, explaining which, if any, can be mitigated and a statement of the measures, if any, proposed to mitigate such environmental impacts; an analysis of a range of reasonable alternatives to the proposed project; a statement explaining why certain impacts were identified as insignificant; an analysis of the proposed project’s cumulative impacts; and **where appropriate** a discussion of the economic and social impacts of the proposed project.² As will be demonstrated in these comments, the DEIR in this case fails to provide adequate information about environmental impacts and, although it is appropriate in this case, fails to discuss the adverse economic and social impacts of the proposed project and the alternatives.

The requirement to set forth project alternatives within the EIR is crucial to CEQA’s substantive mandate that avoidable significant environmental damage be substantially lessened or avoided where feasible. In general, an EIR “must produce information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.”³ To achieve this mandate, “an EIR must consider a reasonable range of alternatives to the project, or to the location of the project, which (1) offer substantial environmental advantages over the project proposal...; and (2) may be ‘feasibly accomplished in a successful manner’ considering the economic, environmental, social and technological factors involved.”⁴ CEQA Guidelines provide that an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.⁵ While the DEIR does present a range of alternatives, it fails to completely and accurately compare their environmental impacts so that the decision maker has adequate information to chose the environmentally superior alternative. These comments describe the important information that the DEIR fails to consider in its comparison of the alternatives.

“A legally adequate EIR ‘must contain sufficient detail to help ensure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug.’” (*Kings County Farm Bureau v. City of Hanford* (5th Dist. 1990) 221

¹ Pub Resources Code, Section 21061.

² CEQA Guidelines §§ 15122-15131.

³ *San Bernardino Valley Audubon Society v. County of San Bernardino* (4th Dist. 1984) 155 Cal. App. 3d 738, 750-751.

⁴ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 566 (italics deleted from original).

⁵ See CEQA Guideline § 15126.6

Cal.App.3d 692, 733 [270 Cal.Rptr.650] (*“Kings County Farm Bureau”*)). The EIR “must reflect the analytic route the agency traveled from evidence to action.” (*Ibid.*) “The EIR must contain facts and analysis, not just the bare conclusions of a public agency. An agency’s opinion concerning matters within its expertise is of obvious value, but the public and decision-makers, for whom the EIR is prepared, should also have before them the basis for that opinion so as to enable them to make an independent, reasoned judgment.” (*Santiago Water District v. County of Orange* (4th Dist. 1981) 118 Cal.App.3d 818, 831 [173 Cal.Rptr.602].)⁶

The DEIR is legally insufficient in that it fails to include the relevant facts in a number of areas and therefore, its analysis of the relative environmental impacts of the alternatives is flawed.

I. THE AGRICULTURAL IMPACTS FROM ALTERNATIVES 1, 2 AND 6 ARE SEVERELY UNDERESTIMATED WHILE THE IMPACTS FROM ALTERNATIVE 3 ARE SEVERELY OVERESTIMATED. ALTERNATIVE 3 IS THE SIGNIFICANTLY ENVIRONMENTALLY SUPERIOR ALTERNATIVE.

a. The Agricultural Impacts from Alternatives 1, 2 And 6 Are Severely Underestimated.

i. The DEIR Underestimates The Impacts On Agriculture From Alternatives 1, 2 And 6 Because It Fails To Take Into Account The Danger and Infeasibility of Utilizing Necessary Farming Equipment Under Or Near The High Voltage Transmission Lines.

According to the DEIR, construction activities for the Proposed Project (Alternative 1) will permanently disturb 24.2 acres of farmland and only 0.1 of those acres will be reclaimed⁷. Of those 24.2 acres, 13.8 acres are acres devoted to orange trees.⁸ No portion of those 13.8 acres will be reclaimed.⁹ In addition to the land that will be permanently disturbed by construction, the DEIR states that an additional 29 acres of orchards must be permanently removed due to the erection of the transmission lines.¹⁰ These 29 acres are currently devoted exclusively to walnut trees, which cannot be replanted due to the 15 foot height restriction under the ROW.¹¹

⁶ Guide to The California Environmental Quality Act 1999 Ed. Page 353.

⁷ Table 4.2-5

⁸ Table 4.2-5

⁹ Table 4.2-5

¹⁰ Page 4.2-15

¹¹ Page 4.2-15

O19-2

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop
 Transmission Project
 July 31, 2009
 Page 5

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop
 Transmission Project
 July 31, 2009
 Page 6

According to the DEIR, construction activities for Alternative 2 will permanently disturb 19.8 acres of farmland and only 1.2 of those acres will be reclaimed.¹² Of those 19.8 acres, 9.1 acres are acres devoted to orange trees and only 0.7 acres are expected to be reclaimed.¹³ In addition to the land that will be permanently disturbed by construction, the DEIR states that an additional 12 acres of orchards must be permanently removed due to the erection of the transmission lines.¹⁴ Again, these 12 acres are acres devoted exclusively to walnut trees, which cannot be replanted due to the 15 foot height restriction under the ROW.

According to the DEIR, construction activities for Alternative 6 will permanently disturb 27.4 acres of farmland and only 0.7 of those acres will be reclaimed.¹⁵ Of those 27.4 acres, 21.2 acres are acres devoted to orange trees and only 0.5 acres are expected to be reclaimed.¹⁶ In addition to the land that will be permanently disturbed by construction, the DEIR states that an additional 12 acres of orchards must be permanently removed due to the erection of the transmission lines.¹⁷ Again, these 12 acres are acres devoted exclusively to walnut trees. The DEIR concludes that most impacts to agriculture are temporary so they are less than significant. The DEIR does acknowledge that conversion of agricultural land to non agricultural use is a Class I significant and unmitigable impact (eg. Impact 4.2.4) but the DEIR underestimates the extent of that impact.

The average numbers in the DEIR severely underestimate the number of acres of agricultural land that will actually be lost due to the Alternative 1, 2, or 6 ROW because they refer only to land that will be directly affected by construction activities. The DEIR incorrectly asserts that, in addition to the land affected by construction and the permanent facilities, walnut orchards are the only crops that cannot be replanted. As discussed below, however, the erection of transmission lines in the new ROW within Alternatives 1, 2, and 6 will require the removal of the majority of orchard types and many other crops located within that new ROW. The DEIR states, "unlike walnut trees, orange and other citrus trees are able to remain productive even when topped at 15 feet under transmission lines." The DEIR continues: "Consequently, orange orchards and other crops growing in the ROW would not require permanent removal in the ROW for maintenance purposes."¹⁸ Both DEIR statements are technically correct. Citrus trees can be productive when limited to a height of 15 feet and citrus trees below 15 feet will not interfere with maintenance of the transmission lines. The problem is that the DEIR draws the incorrect conclusion that citrus can, therefore, be productively farmed under the transmission lines. The

¹² Table 4.2-7.
¹³ Table 4.2-7
¹⁴ Page 4.2-19
¹⁵ Table 4.2-11
¹⁶ Table 4.2-11
¹⁷ Page 4.2-24
¹⁸ Page 4.2-15 (emphasis added)

O19-2
 cont.

equipment necessary to efficiently produce a crop exceeds the 15 foot height restriction and cannot be operated safely under the transmission lines. The inability to operate this equipment will preclude not only re-planting directly under the transmission line after construction, but will prevent commercial citrus farming and will have significant impacts on commercial farming of many other crops within the entire width of the new ROW.

1. The DEIR Does Not Address That The Equipment Necessary to Efficiently Farm and Maintain Citrus Orchards and other Crops Will Prevent Commercial Farming Within the New ROW Proposed for Alternative 1, 2, or 6.

It is not practical, feasible or safe for workers or contractors to carry out the tasks necessary to successfully farm a citrus orchard under or near the transmission lines. The intensive operations required to maintain, irrigate, and harvest the orchards will be impossible under or near the transmission lines. For example, mechanical toppers are used to prune the top of the citrus trees. This machine has a boom arm and whirling saws that swing up to 30 feet or more. It would not be safe to operate this machine under or near the transmission lines due to the potential for contact with the lines. Additionally, ground spray equipment used for application of fertilizer, pesticides and other products to the orchards would be extremely dangerous to operate under the transmission lines. Of course, aerial spraying is not possible. Paramount Citrus and other growers of the seedless Clementine oranges must drape nets over the trees to prevent bees from pollinating the trees during the bloom. This net machine has a boom that reaches a height of 30 feet. Again, it would not be safe to operate this machine under or near the transmission lines due to the potential for contact with the lines.

The ROW for Alternatives 1, 2, or 6 will interfere with irrigation practices as well. The DEIR requires that all underground water pipelines must have at least 36 inches of cover.¹⁹ It is impossible to irrigate while also maintaining this required 36 inches of cover. In addition, water is frequently used for frost protection, often utilizing metal surface pipelines that cannot be used under the transmission lines. To protect citrus trees from frost damage, wind machines are necessary. Wind machines have a tower height of 35 feet and a propeller that reaches another 8-12 feet above that. In extreme cases some growers also utilize helicopters for frost protection. Like the other normal farming practices discussed, it would not be safe to utilize any of the normal and essential frost protection methods under or near the transmission lines and no other methods are reasonably available. Finally, the normal commercial harvesting methods are unsafe under the transmission lines. Harvesting is done with aluminum picking ladders and/or forklifts, each reaching a height of 20 feet, and presenting an unacceptable risk to workers.

¹⁹ Page 2-40.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 7

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 8

Because citrus growers cannot perform most normal tasks used in the rest of their orchards, they will not continue to farm under or near the transmission lines. Similar concerns will impair commercial farming of almost any similar orchard crop. Crops other than orchards also utilize significant specialized equipment that may be problematic under or near the transmission lines.

O19-2
cont.

2. The DEIR Improperly Fails to Distinguish Between Existing Impacts to Agriculture in the Existing Right of Way and New Impacts to Agriculture in the Proposed Right of Way.

The DEIR assumes that any crop with a normal growing height below 15 feet can be commercially farmed under the transmission lines. Because this assumption is incorrect, the DEIR substantially underestimates the amount of productive crop acreage, consisting primarily of Prime Farmland and Farmland of Statewide Importance, that will be lost if any of Alternative 1, 2 or 6 are approved. The DEIR, in Table 4.2-3, details the agricultural land that is within the right of way of each alternative but it does not calculate the new ROW and the existing ROW separately. It is crucial to consider the new ROW separately from the existing ROW because, with the exception of temporary construction impacts, all of the agricultural impacts of the existing ROW have already occurred. By treating the existing ROW impacts as the same as the proposed new ROW Table 4.2-3 fails to accurately compare the relative environmental impacts of the alternatives as required by CEQA Guideline 15126.6 (d).

O19-3

3. The Impacts of the Project and Alternatives 2 and 6 on Agriculture in the Right of Way Are Substantially Greater than the Impacts of Alternative 3. Because Alternatives 1, 2 and 6 Include Significant New Right of Way Through Agricultural Land.

Table 4.2-3 indicates that the Alternative 1 ROW includes a total of 231 acres, the Alternative 2 ROW includes a total of 341 acres, Route 3 includes a total of 382 acres, and Route 6 includes a total of 291 acres. This implies that Alternative 3 impacts the most acreage and Alternative 1 impacts the least acreage. Although the acreage numbers are technically correct, the DEIR does not make the important distinction between the number of new acres of ROW in each alternative and the total number of acres in the existing ROW. We have calculated that the number of new acres in each ROW is the following: Alternative 1 is 217 acres; Alternative 2 is 180 acres; Alternative 3 is 153 acres; Alternative 6 is 175 acres. More important than the total acres, however, is the distribution of uses and soil types in the new ROW acres. Once again, Table 4.2-3 provided in the DEIR is deficient because it fails to provide this crucial information for comparison of the Alternatives. Based on other information, we have concluded that the soil types in the new ROW are distributed as follows; In Alternative 1 only 11.4 acres are grazing

O19-4

land and the great majority of the new ROW is Prime Farmland or Farmland of Statewide Importance. In Alternative 2, 30 acres are grazing and the balance is in the more important categories. In Alternative 3, all of the new ROW is grazing, not mapped or of local importance—there is no Prime Farmland or Farmland of Statewide Importance in the new Alternative 3 ROW. In Alternative 6 there are 4 acres of grazing land, 48 acres of Farmland of Local Importance and the rest of the new ROW is Prime Farmland or Farmland of Statewide Importance.

O19-2
cont.

When the distribution of Prime Farmland and Farmland of Statewide Importance is compared for only the new ROW, the conclusion is much different than that drawn by the DEIR. Any permanent impacts of the existing transmission line ROW have already occurred. Moreover, the DEIR makes clear on the whole that reconstruction of the existing transmission line for the portion contained in each of the alternative routes will either maintain or reduce the impacts on agriculture within the existing ROW. For example, a net 2.0 acres will be reclaimed in the portion of existing ROW contained in Alternative 3.²⁰ Therefore, the permanent and significant impacts of this project will occur only in the new ROW. To properly inform the public and decision makers, the DEIR should discuss the new ROW separately rather than obscuring the distinctions between the Alternatives as DEIR Section 4 has consistently done throughout its analysis of agricultural impacts and other categories of impacts.

O19-4
cont.

The DEIR fails to accurately indicate the number of acres of citrus trees and other crop production that will be lost annually in the proposed new ROW as a result and of the farming limitations discussed above. Once again, we must rely upon our own calculations because the DEIR has failed to provide this important information. We will focus on the example of Alternative 2 where Paramount Citrus has the most orchards because we have the most reliable data for that alternative. We estimated that 180 acres of new ROW needs to be created for Alternative 2. Subtracting the 30 acres of grazing land and the 9 acres of presumably rocky land on Colvin Mountain that is not mapped by the Farmland Mapping Program, we estimate that Alternative 2 creates new permanent Class 1 significant and unmitigable impacts to 140 acres of Prime Farmland, Farmland of Statewide Importance, Unique Farmland and Farmland of Local Importance. Although not all of that acreage is currently planted to citrus, our observation is that most of the 140 acres in the new Alternative 2 ROW is either planted to citrus or could be planted to citrus if the transmission lines are not built across it. Therefore, the impacts to the Paramount Citrus orchards described below are indicative of the adverse impacts that would occur along the entire ROW.

4. Paramount Citrus Farming Example in the Path of Alternative 2.

²⁰ 4.2-21.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 9

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 10

To provide an example of the impacts of the Alternative 2 ROW we calculated the impacts on the orchards owned and operated by Paramount Citrus. The right of way on their property includes 7 acres. The DEIR estimates that only 4.39 of those acres will be directly affected by transmission facilities. Based on its erroneous assumptions the DEIR therefore concludes that only 4.39 acres on the Paramount Citrus property will be affected by Alternative 2. By contrast, Paramount Citrus has determined that it will lose 17 acres of citrus trees because they cannot continue to safely and effectively farm the acreage within or near the ROW for the reasons discussed above. That is in stark contrast to the EIR assertion in Table 4.2-6 that only 24 acres in the entire new Alternative 2 ROW will be permanently impacted. In addition, Paramount Citrus will lose a well, will need to redesign its irrigation system, including replacing a reservoir and several pumps and must relocate two wind machines. Because the transmission line is not proposed along a farm road or other convenient division of the orchard, Paramount Citrus will also incur additional costs to continue farming some additional property. The inability to farm the very high value citrus crops under the transmission lines will have a significant adverse economic effect on the community as discussed in detail in Section II below.

O19-5

5. The DEIR Fails to Recognize That the Equipment Necessary to Efficiently Farm and Maintain Crops Will Prevent Planting Almost All Crops Under or Near The Alternative 1, 2, or 6 ROW.

Like citrus, many other commercial crops are farmed with equipment that presents very high risks to the operators if used under or near the transmission lines. While the equipment may be different, the result is the same. Many farmers will be unable to economically farm any crops under or near the transmission lines. However, the DEIR never addresses the loss of these crops. In fact, the DEIR states that such crops can be replanted.²¹ The evidence clearly establishes that the DEIR severely underestimates the number of acres that will be converted to non-agricultural land – a significant unmitigable effect²² – if the Alternative 1, 2, or 6 ROW is approved by the CPUC.

O19-6

ii. The DEIR Fails to Consider that Land Outside the Right Of Way Will Be Converted to Non-Agricultural Land Due to Logistical Considerations of Farming Practices.

The DEIR fails to consider that logistical considerations will interfere with the efficient farming of existing orchards and/or other crops if a new ROW is established. In many instances land that the DEIR does not project will be disturbed by construction and that is outside the ROW itself will be adversely affected by the transmission lines. The established farming

O19-7

²¹ See 4.2-15.
²² See 4.2-15, 4.2-19, and 4.2-25

operations that the Alternative 1, 2 or 6 new ROW will slice have through established facilities and infrastructure designed and constructed for efficiently farming the property as it is currently laid out. The design did not consider the location of a utility ROW that was not yet proposed. Once the ROW is constructed, the combination of the ROW restrictions (e.g. how close necessary farming equipment can realistically get to the ROW) and the restrictions that naturally come from established facilities and infrastructure could render portions of property and infrastructure stranded and unfarmable. For example, land could become inaccessible for equipment because the equipment cannot get around both the ROW and already established structures. Additionally, established irrigation systems may not be usable in certain areas because the location of the system is incompatible with the location of the ROW. This will force farmers to abandon these portions of their land because they cannot practically or economically farm. As discussed above, only 7 acres of Paramount Citrus and is actually within the Alternative 2 ROW but Paramount Citrus will not be able to farm an additional 10 acres due to a combination of safety and logistical considerations. The problem of acreage stranded by the new transmission lines is especially acute in any high value orchards – such as citrus - because they are permanent plantings with irrigation systems that cannot be modified easily or quickly.

O19-7
cont.

The DEIR fails to address this issue at all because it specifically assumes that farming operations can and will continue under and near the transmission lines.²³ Since the DEIR has not surveyed these potential impacts it is difficult to evaluate the full extent of the problem. We are aware, however, that loss of acreage will occur and it needs further study.

The failure of the DEIR to consider these crops and orchards that will be converted to non-agricultural land due to the logistical considerations of the farming operations once the Alternative 1, 2, or 6 ROW is constructed establishes that the DEIR severely underestimated the amount of farmland that will be converted to non-agricultural use – a significant unmitigable effect²⁴.

iii. The DEIR Additionally Underestimates the Impacts from Alternatives 1, 2 and 6 Because it Does Not Sufficiently Address the Conflicts Between These Alternatives and the Local Policies Intended to Preserve Agricultural Lands.

The following local ordinances and polices are affected by Alternatives 1, 2, and 6: (1) Goal 1LU.A of the Tulare County General Plan Land Use and Urban Boundaries Element requires the preservation of the agricultural economic base; (2) Policy 6.I.5 of the Tulare County General Plan Environmental Resources Management Element requires an attempt to maintain

O19-8

²³ See 4.2-15.
²⁴ See 4.2-15, 4.2-19, and 4.2-25

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 11

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 12

agriculture as a primary, extensive land use; (3) Issue 9: Agricultural Lands, Goal 1 of the Farmersville General Plan states that the agricultural economic base must be protected; and (4) Issue Four: Urban Boundaries and Farmland Protection, Goal 1, Objective 1 of the Farmersville General Plan requires the preservation and protection of agricultural lands.²⁵

The proposed ROW for Alternatives 1, 2, and 6 will require SCE to acquire several miles of new ROW. Specifically, the Proposed Project (Alternative 1) will require acquisition of 17.4 miles of ROW²⁶, Alternative 2 will require the acquisition of 12.2 miles of ROW²⁷, and Alternative 6 will require acquisition of 12.4 miles of ROW.²⁸ As discussed above, citrus and similar crops cannot be farmed under any portion of the new ROW due to the machinery that must be used in profitable commercial farming operations today. The loss of this productive agricultural land is contrary to each of the enumerated local ordinances and policies. Reduction in productive agricultural acreage also translates into fewer dollars and jobs generated from agriculture for the local economy.

Since the DEIR dramatically underestimates the number of acres of agricultural lands that will actually be converted to non-agricultural lands, the DEIR makes it difficult to fully quantify the significant impacts of Alternatives 1, 2, and 6 on these local policies. It is clear, however, that creating new ROW across prime agricultural land instead of choosing a viable alternative route violates each of those policies.

iv. Because The Agricultural Impacts are Underestimated, the Project Cost for Alternatives 1, 2, and 6 will be Substantially Higher than Projected.

The variety of impacts from the three Alternative routes traversing high value agriculture will result in significant battles over condemnation awards and costs that are significantly higher than the minimal impacts projected by the DEIR. In Paramount Citrus' case, we are projecting that 17 acres or more will be permanently removed from orchard production. Based on the cost of the orchard improvements that must be removed and the significant lost annual revenue from Clementines and other citrus, the value per acre will exceed almost any other crop land in the San Joaquin Valley. In addition, there will be significant severance damages because the entire operation will be somewhat less efficient and cost effective without that acreage. Finally, replacement of Paramount Citrus' well and reconfiguration of its irrigation system will require a minimum of \$120,000.00, though it certainly may be more.

²⁵ 4.2-7 to 4.2-9
²⁶ Page 2-6
²⁷ Page 3-10
²⁸ Page 3-16

O19-8
cont.

O19-9

When the costs for all of the affected farms are compiled, the acquisition costs for either Alternative 1, 2 or 6 will greatly exceed the cost of right of way for Alternative 3. While there may be more construction costs for Alternative 3, working within the existing ROW can have significant cost advantages.

b. The Agricultural Impacts From Alternative 3 Are Severely Overestimated.

i. The Impacts on Agricultural Land Within the Alternative 3 ROW Has Been Overestimated Because The Agricultural Land Traversed by Alternative 3 is Already Within a Utility Right of Way.

Only Alternative 3 does not require acquisition and construction of miles of new right of way across Prime Farmland and Farmland of Statewide Importance. Alternative 3 only requires the acquisition of 9.7 miles of ROW.²⁹ The remaining 14.6 miles of Alternative 3 ROW will be within the current SCE Big Creek-1 & 3 Rector ROW that will merely be replaced with updated equipment as part of the current project.³⁰ The effects on farmland within an already existing utility ROW are different from the effects on farmland where a new utility ROW must be created. The DEIR fails to address this difference at all. It is impossible to objectively consider the overall impacts on agriculture between the four action alternatives when the DEIR does not accurately address the disparate nature of the agricultural impacts.

1. The Land Use in the Existing ROW Has Been Designed and Developed to Accommodate the Transmission Lines that Have Been in Place for Decades.

Although Alternative 3 will cross farmland, the discussion in the DEIR does not acknowledge that all of the Prime Farmland and Farmland of Statewide Importance traversed by the Alternative 3 ROW is already burdened by a utility ROW. Utility lines and poles are already in place and have been in place for between 80 and 98 years depending on the specific location.³¹ As a result, the entire fabric of the land use along the existing ROW has been developed over decades to account for the location of the ROW, as well as other logistical limitations caused by the ROW, and the obtrusive existing transmission lines and towers within it. In fact, in some locations, the ROW is devoted to farm roads or other non-cultivated uses. In other areas there are older orchards that cannot be farmed with current methods; these orchards are not as productive as the same types of orchards that would be affected by the other alternatives. Even

²⁹ Page 3-13
³⁰ Page 3-13.
³¹ 4.2-20 to 4.2-22

O19-9
cont.

O19-10

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 13

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 14

where crops have been planted under or near the existing ROW, the planting has been designed to account for the existence and location of the transmission lines. Specifically, it is clear in Figure 4.1-3a (View from Road 148 at Cameron Creek looking South toward Rector Substation) that farming operations in the existing ROW have designed their orchards and fields around the transmission towers. It can be clearly seen in this figure that a buffer zone has been created around the transmission pole. Since this buffer zone already exists, replacing transmission poles in the existing ROW will result in minimal construction impacts and will not require the permanent removal of a significant amount of currently utilized crop land. These differences are significant and important in objectively comparing the alternatives, yet they were not addressed in the DEIR.

O19-10
cont.

The DEIR has overestimated the impacts that the Alternative 3 ROW will have on agriculture. The DEIR appears to consider that the temporary construction impacts for a mile of agricultural land within the existing ROW is equivalent to the construction impacts for a mile of agricultural land within the proposed new ROW. However, the quality of the agriculture is very different between the existing ROW affected by Alternative 3 and the new ROW included in Alternatives 1, 2, and 6. Since the quality of the agriculture is different, the effects of Alternative 3 on agriculture are not as severe as the DEIR portrays. Furthermore, due to the historical use of the agricultural land under the existing ROW, the effects of Alternative 3 on agriculture are not as severe as the effects of Alternative 1, 2, or 6, or as severe as the DEIR portrays.

2. The Agricultural Value of the Land in the Existing ROW is Substantially Less Than the Value of the Lands Impacted by the New ROW in Alternatives 1, 2 and 6.

All of the existing ROW is in heavier soils and has colder local temperatures so the land is not suitable for citrus orchards--the highest value crops grown in the area. The land traversed by the new Alternative 1, 2, or 6, ROW is known as the "citrus belt" where quality navel oranges, lemons and mandarins are successfully grown for export all over the world.³² These differences in climate and soil between the Alternative 3 and Alternatives 1, 2, and 6 ROW, impact the productivity of agricultural land. The difference is agricultural productivity clearly establishes that the effects each ROW will have on agriculture are, in fact, different. However, the DEIR neither articulates, nor discusses this distinction.

O19-11

3. The New Portion of the Alternative 3 ROW Has Insignificant Impacts.

O19-12

³² 4.2.-1

The new ROW within Alternative 3 consists of 9.7 miles crossing Stokes Mountain and Stone Corral Canyon. The soils are primarily suitable for grazing land. There are heavy alkaline soils at the bottom of Stokes Mountain where the new ROW reaches the existing ROW. Those soils have little agricultural value and the new Alternative 3 ROW will not affect existing crops. These areas are not suitable for citrus or any other high value crops. The dry land grazing operations crossed by Alternative 3 will not experience adverse economic impacts from the new ROW because they do not utilize either farming equipment or irrigation that would be impaired by the transmission lines. The CPUC has received a letter from a property owner named Ron Paregian, who has orchards affected by Alternative 1 and grazing land affected by Alternative 3. He states that his grazing land will experience only a minor loss of utility so the new Alternative 3 ROW and will not be objectionable to him as a property owner. He agrees that the impacts on the orchard land will be much more serious

O19-12
cont.

ii. The DEIR Overestimates The Impacts From Alternative 3 Because The EIR Fails To Acknowledge That Alternative 3 Best Serves The Local Policies Aimed At Preserving Agricultural Lands.

O19-13

The local policies and objectives discussed in Section 1.a.iii above also support Alternative 3 as the superior alternative. As discussed, more than 14 miles of the Alternative 3 route is within existing SCE utility ROW and therefore does not create new impacts to valuable farmland.

iii. The DEIR Failed To State That Alternative 3 Is The Environmentally Superior Alternative Based On Its Lack Of Significant Effects On Agriculture.

O19-14

As discussed in this Section, the new ROW required for Alternative 1, 2 or 6 would result in the permanent retirement of significant acreage devoted to high value crops. This is contrary to adopted local and State policies. The routes through existing orchards will also have significant negative effects on irrigation equipment and the ability to effectively farm some of the remaining plantings. These new routes will have a resulting significant adverse economic impact on the local communities. Alternative 3 will have virtually no new impacts on agricultural land because its new ROW crosses grazing land and heavy alkali soils. None of the new ROW for Alternative 3 is classified as Prime Farmland or Farmland of Statewide Importance. The rest of Alternative 3 is within the existing ROW. Therefore, Alternative 3 best serves the local polices and ordinances aimed at preserving agricultural lands and will have by far the least impacts upon agricultural resources.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 15

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 16

II. THE DEIR SHOULD HAVE CONSIDERED THE SIGNIFICANT ECONOMIC IMPACTS THAT WILL BE FELT BY THE LOCAL COMMUNITIES DUE TO THE DECREASE IN FARMING OPERATIONS CAUSED BY ALTERNATIVES 1, 2 AND 6.

a. The DEIR Should Have Considered the Economic and Social Impacts of the Alternatives Because the Economic and Social Impacts are Directly Caused By the Physical Impacts of the Alternatives.

Although, generally, an EIR is required only to evaluate the environmental impacts of a project³³, when physical impacts on the environment cause economic and social effects caused by the EIR should evaluate and consider those economic and social effects.³⁴ The DEIR is deficient because it failed to address the economic and social effects of the physical changes to the environment produced by Alternatives 1, 2, and 6.

As discussed in Section I above, Alternatives 1, 2, and 6 will permanently convert Prime Farmland, Farmland of Statewide Importance and Unique Farmland to non-agricultural use due to the inability to use farming machinery and equipment under or near the transmission lines. When farmland is taken out of production, those individuals who were once employed to work the land, those employed to harvest, process and package the products grown on the land, and those employed to provide specific services to the land will no longer be employed. When jobs are lost due to loss of productive agricultural lands, less money goes into the local community and the State. Furthermore, when jobs are lost, there is a ripple effect felt in the local community as well as the State because “[e]ach dollar earned within agriculture fuels a more vigorous economy by stimulating additional activity in the form of jobs, labor income and value added.”³⁵

i. Income Into The Community

Here in the Central Valley³⁶ the agricultural production and processing industry creates a value added multiplier of 2.21.³⁷ This means that in the Central Valley agricultural production and processing industry, for every dollar spent in farming and agricultural related industries – labor and property income and indirect business taxes – an additional \$1.21 is generated in the

³³ California Public Resources Code § 21100.

³⁴ 14 C.C.R. § 15313.

³⁵ *The Measure of California Agriculture, 2006: Chapter 5, Agriculture's Role in the Economy* (Preprint Draft, November 29, 2006) by Agricultural Issues Center, University of California, p. 6.

³⁶ The Central Valley consists of Butte, Colusa, Fresno, Glenn, Kern, Kings, Madera, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo and Yuba counties.

³⁷ *The Measure of California Agriculture, 2006: Chapter 5, Agriculture's Role in the Economy* (Preprint Draft, November 29, 2006) by Agricultural Issues Center, University of California, p. 13.

O19-15

State economy.³⁸ When a farming operations hires fewer service providers, or hire service providers less frequently, not only is that farming operation putting less money directly into the economy, but the lost money fails to generate additional economic activity within the economy through the ripple effect.

1. Farming Operations – Labor, materials and supplies

As we have discussed, many farmers will be forced to cease all farming operations on much of the land within or near and adjacent to the ROW because of cultural operations needed to farm certain types of crops (citrus, olives, pomegranates, most nut crops, etc.). In addition, other land will also be affected by the Project. Since the DEIR has not calculated the correctly number of acres that will be put out of production, it is impossible to describe exactly how much income will be lost to the community directly and through the ripple effect. However, it is clear that a significant amount of money will be lost because of the Alternative 1, 2 or 6 ROW. For example, if Alternative 2 is built through citrus orchards owned and operated by Paramount Citrus, then it will force Paramount Citrus to take 17 acres of citrus orchard out of production. From just those 17 acres Paramount Citrus will spend a total of \$38,808.00 less in the local community based on this year's farming costs. The calculation is based upon actual 2009 farming costs after subtracting insurance, water and utilities as those payments do not go to local employees or vendors. That equates to more than \$2,200.00 per acre in direct farming expenses that is not returned to the community for every acre of Paramount Citrus' orchard that is lost under any of the Alternatives. Using the value added multiplier of 2.21, that \$38,808.00 would have generated \$85,765.00 for the local economy.

The more than \$85,000.00 lost to the economy as described above represents an impact generated by only a single farming operation. Similar impacts will be generated by other farming operations impacted by the new ROW created for Alternative 1, 2, or 6. We previously calculated that the new ROW portion of Alternative 2 will include approximately 140 acres of Prime Farmland and Farmland of Statewide Importance. If that is correct and we apply the Paramount Citrus estimated loss per acre (i.e., \$2,200.00 per acre) then the total lost farming expenses paid locally will be approximately \$300,000.00. With a multiplier of 2.21, that equates to lost local economic activity of \$680,000.00. This money represents a significant adverse impact to the local and state economy that is not adequately addressed in the DEIR. Because we cannot evaluate the amount of land outside the ROW that may be adversely affected, the impacts may be greater.

2. Packing Operations – Labor, materials and supplies

³⁸ *The Measure of California Agriculture, 2006: Chapter 5, Agriculture's Role in the Economy* (Preprint Draft, November 29, 2006) by Agricultural Issues Center, University of California, p. 1.

O19-15
cont.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 17

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 18

In Paramount Citrus' experience, harvesting, hauling and packing costs average approximately \$3,300.00 per acre. From just those 17 acres Paramount Citrus will spend approximately \$56,100.00 less in the local community based on this year's packing costs. Using the value multiplier of 2.2.1, that \$56,100.00 would have generated \$123,981.00 for the local economy.

The more than \$123,000.00 described above lost to the economy represents an impact generated by only a single farming operation. Similar impacts to the economy will be generated by other farming operations impacted by Alternative 1, 2 or 6. We previously calculated that the new ROW portion of Alternative 2 will adversely affect approximately 140 acres of Prime Farmland and Farmland of Statewide Importance. If that is correct and we apply the Paramount Citrus estimated loss per acre then the total lost farming expense paid locally will be approximately \$462,000.00 at \$3,300.00 per acre. With a multiplier of 2.21, that equates to lost local economic activity of \$1,020,000.00. In total, the new ROW proposed for Alternative 2 could cost the local economy in excess of \$1.7 million every year. That loss represents a significant adverse impact to the local and state economy that is not adequately addressed in the DEIR.

ii. **Jobs**

Here in the Central Valley, the agricultural production and processing industry creates an employment multiplier of 1.91, which means that for every job in the agricultural production and processing industry another 0.91 jobs are created. Again, the DEIR has not calculated the exact number of acres that will be put out production by Alternatives 1, 2, and 6, so it is impossible to describe how many jobs will be lost by those who work the land and provide services to farming operations. Based on the potential economic losses, however, the job losses will be significant. The DEIR is clearly insufficient due to its failure to examine this important adverse impact on local communities.

III. **THE DEIR IS INSUFFICIENT BECAUSE IT DOES NOT ADEQUATELY ADDRESS THE SERIOUS ADVERSE IMPACTS THAT ALTERNATIVES 1, 2, AND 6 WILL HAVE ON GROUNDWATER SUPPLY.**

David Bean, PG, CHG of AMEC Geomatrix in Fresno, California conducted and prepared a report entitled *Potential Groundwater Impacts from Proposed Southern California Edison San Joaquin Cross Valley Loop Alternative Routes 2 and 6* ("Hydrology Report") attached hereto as "Exhibit 1", and incorporated herein by this reference. Mr. Bean, a Principal Hydrogeologist with AMEC Geomatrix, is a Professional Geologist and Certified

O19-15
cont.

O19-16

Hydrogeologist in California. He has been practicing hydrology in the San Joaquin Valley for over 20 years. After conducting an extensive survey of groundwater resources in the vicinity traversed by Alternatives 2 and 6, reviewing groundwater elevation data collected by the California Department of Water Resources (DWR), and reviewing the DEIR, Mr. Bean made the following conclusions in the Hydrology Report: (1) the DEIR comparison of potential groundwater impacts from the various alternatives is deficient; (2) the DEIR fails to acknowledge the risks of construction on groundwater recharge and resources in the foothill areas of Alternatives 2 and 6; and (3) the DEIR fails to acknowledge the risks of construction of roads and foundations to existing water supply wells in the shallow alluvium and fractured bedrock beneath Alternative Routes 2 and 6.³⁹ Overall, the Hydrology Report concludes that "the DEIR is deficient because it fails to adequately address potential significant adverse impacts to groundwater."⁴⁰

Although the Hydrology Report finds that there is significant evidence that construction of the Alternative 2, or 6 ROW could impact, and in some cases severely deplete or eliminate, available groundwater⁴¹, the DEIR never addresses or analyzes this potential impact.⁴² In fact, the DEIR states "the Proposed Project or alternatives...would...have **negligible impact upon existing groundwater supplies and processes.**"⁴³ The only potential impacts discussed in the Section 4.8 of the DEIR (Hydrology and Water Quality) are (1) whether each particular alternative will "[v]iolate any water quality standards or waste discharge requirements"⁴⁴; (2) whether the particular alternative will "[s]ubstantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or sedimentation on- or off-site"⁴⁵; and (3) whether the particular alternative will "[p]lace within a 100-year flood hazard area structures which would impede or redirect flood flows"⁴⁶.

The DEIR fails to provide accurate and useful information to compare the water supply and groundwater impacts of the different alternatives because it relies upon macro data for the Kaweah and Tulare Basins as a whole.⁴⁷ The DEIR makes the broadly applicable conclusion that much of the San Joaquin Valley overlies large unconfined aquifers and, therefore, concludes that the alternative transmission routes under study must overlie similar large aquifers. Crucial

³⁹ Hydrology Report page 6.

⁴⁰ Hydrology Report page 3.

⁴¹ Hydrology Report page 6.

⁴² See Section 4.8 (Hydrology and Water Quality)

⁴³ 4.8-14 (emphasis added)

⁴⁴ 4.8-15

⁴⁵ 4.8-18

⁴⁶ 4.8-18

⁴⁷ 4.8-4 and 4.8-5

O19-16
cont.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 19

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 20

areas of the citrus belt, however, are located in the foothill areas due to the warmer micro climate. As the Hydrology Report describes, these areas, including the eastern half of Alternatives 2 and 6, are entirely reliant upon small fully or partially confined aquifers and extremely unpredictable fractured bedrock sources of water.⁴⁸ The failure of the DEIR to include the potentially significant impacts on groundwater supply and processes, as described in the Hydrology Report renders the DEIR insufficient.

O19-16
cont.

a. Although A Number Of Existing Irrigation Wells Are Located In The Path Of The New Alternative 1, 2, And 6 ROW, The DEIR Does Not Address The Potential Impossibility Of Successfully Relocating Impacted Wells.

The DEIR never addresses the potential impacts on the availability of groundwater, the only available source of irrigation water for many farming operations. Instead, the DEIR states in Section 4.2 (Agricultural Resources) that although the construction of Alternatives 1, 2, or 6 could impact existing irrigation systems, the impact will be “less than significant with mitigation.”⁴⁹ This mitigation measure requires SCE to (1) “Coordinate with landowners to ensure that construction does not impact irrigation and/or ancillary farming systems to a degree that farming practices cannot be maintained”⁵⁰; and (2) “Maintain existing levels of water available to farmers via the current irrigation system. This may include, but not be limited to, implementing re-routing and/or temporary irrigation systems.”⁵¹

O19-17

The mitigation measure designed to mitigate injuries to irrigation systems is not adequate because it can be both impossible⁵² and/or prohibitively expensive⁵³ to successfully relocate impacted wells. As discussed in the Hydrology Report, aquifers at the base of the foothills such as the Elderwood Area and Antelope Valley, both traversed by Alternatives 2 and 6, are unpredictable, and it may not be possible to construct new wells that will effectively replace the impacted wells.⁵⁴ Furthermore, the eastern portion of the Alternative 1 ROW near Lemon Cove would present similar issues. When attempting to relocate a well, it is possible to move mere feet and not be able to find a similar or even an adequate source of water. There is no guarantee that a comparable well can successfully be constructed within a farmer’s property, let alone within a reasonable distance of existing wells.

⁴⁸ Hydrology Report page 2.

⁴⁹ 4.2-16

⁵⁰ 4.2-16

⁵¹ 4.2-16.

⁵² Hydrology Report page 5 (“it may not be possible to construct new wells that will effectively replace any impacted wells”); See also page 6.

⁵³ Hydrology Report page 5 (“typical radial collector wells cost between \$3,000,000.00 and \$5,000,000.00”).

⁵⁴ Hydrology Report page 5; See also page 6.

If irrigation wells cannot be relocated as assumed by mitigation measure 4.2-5, land cannot be farmed and crops cannot be produced. A lack of water will force the farming operation to shut down production and will preclude any other farming operation on that property except dry land grazing. The elimination of farming operations will transform the property from high value agricultural land to non-agricultural land – a significant unmitigable effect⁵⁵ that is never addressed in the DEIR. Additionally, this potential for an inability to relocate impacted wells clearly contradicts the statement in the DEIR that there will be negligible impacts upon existing groundwater supplies and processes. Therefore, the DEIR is insufficient.

O19-17
cont.

b. The DEIR Does Not Adequately Address The Potential Effect To The Local Groundwater Supply From Construction Of Power Poles And Service Roads.

Since the DEIR states “the Proposed Project or alternatives...would...have negligible impact upon existing groundwater supplies and processes,”⁵⁶ the DEIR does not address the potential for the construction of power poles and access roads to impede or preclude the flow of groundwater.

O19-18

Although never addressed in the DEIR, there are significant potentially adverse impacts to groundwater from the construction of access roads.⁵⁷ The construction of access roads within groundwater recharge areas in the Elderwood area and Antelope Valley, and the additional land within that groundwater recharge area that will be permanently disturbed by construction, could significantly reduce permeability and, therefore, reduce annual recharge capacity.⁵⁸ Furthermore, recharge areas within the eastern portion of the Alternative 1 ROW near Lemon Cove would present similar issues. This potential loss of recharge capacity could reduce the amount of groundwater available in the aquifer, and, as a result, the amount of groundwater available to those in the immediate area as well as down gradient areas to the west and the south that rely upon local recharge to that aquifer for their water needs.⁵⁹ This evidence that construction of access roads, especially within the recharge areas, could impact groundwater clearly contradicts the statement in the DEIR that there will be negligible impacts upon existing groundwater supplies and processes. Therefore, the DEIR is insufficient.

O19-18

Although never addressed in the DEIR, there are significant potential impacts to groundwater from the construction of the transmission poles.⁶⁰ Since the transmission pole

⁵⁵ See 4.2-15, 4.2-19, and 4.2-25

⁵⁶ 4.8-14 (emphasis added)

⁵⁷ See Hydrology Report pages 3-5.

⁵⁸ Hydrology Report pages 3-5.

⁵⁹ Hydrology Report pages 4-5.

⁶⁰ Hydrology Report pages 3-5.

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 21

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 22

foundations will be buried up to 60 feet in the ground, and groundwater in the Elderwood area and Antelope Valley only has a depth of between 10 and 40 feet, the construction of transmission poles in the Elderwood area and the Antelope Valley has the potential to create permanent barriers to groundwater flow.⁶¹ Furthermore, the eastern portion of the Alternative 1 ROW near Lemon Cove would present similar issues. This potential blockage of groundwater would prevent groundwater from traveling through the aquifer to irrigation wells to the west and the south.⁶² This evidence that construction of power poles could impact groundwater clearly contradicts the statement in the DEIR that there will be negligible impacts upon existing groundwater supplies and processes. Therefore, the DEIR is insufficient.

O19-18
cont.

c. No Feasible Mitigation Is Available For Adverse Impacts To Groundwater.

The DEIR does not propose any mitigation for the substantial risks of serious adverse impacts to groundwater presented by Alternatives 2 and 6 because the DEIR did not recognize that those impacts exist. There are, however, no feasible mitigation measures. There is only one alternative source of water (Sentinel Butte Water Co.) in the eastern portion of Alternatives 2 and 6. That source is only available to a very limited number of growers. If Alternative 2 or 6 is adopted, that water source will be destroyed. No additional surface water supplies are available and no other distribution facilities have been constructed to serve the area. All of the surface water that occurs in the region is subject to existing water rights. According to the State Water Resources Control Board both the Kings River and the Tule River System (including the Kaweah River) are fully appropriated (Appendix A of Water Rights Order 98-08); therefore, no unappropriated surface water is available for mitigation of adverse groundwater impacts. Although groundwater is available to the west and could theoretically be pumped uphill to the Sentinel Butte Valley (Antelope Valley), the cost of the infrastructure and the per acre foot cost of pumping the water would be prohibitive for farming operations. Most importantly, pumping groundwater from the overlying land to a distant farm is legally considered an export of groundwater. Exports can only occur legally when there is surplus water in the aquifer. The DEIR states that the Sub-basin is subject to a significant annual overdraft.⁶³ Therefore, any groundwater exports to mitigate adverse transmission line impacts would not be allowed. As a result, the potentially significant groundwater impacts and irrigation well impacts of Alternatives 2 and 6 are significant and unmitigable.

O19-19

d. Alternative 3 Is The Significantly Environmentally Superior Alternative. Because It Does Not Have Significant Adverse Impacts On Groundwater.

O19-20

⁶¹ Hydrology Report page 3.
⁶² Hydrology Report page 5.
⁶³ Groundwater hydrology page 4.8-5.

In contrast to the significant impacts on groundwater availability from Alternatives 1, 2, and 6 addressed above that are not analyzed in the DEIR, Alternative 3 has very few groundwater impacts and is the environmentally superior alternative.

No portion of the Alternative 3 ROW passes through the Elderwood area, Antelope Valley or any significant foothill recharge area. The DEIR statement that the area overlies a large unconfined aquifer is accurate for the valley portion of Alternative 3. As discussed in the Hydrology Report, the alluvial aquifer is approximately 300 feet thick when it reaches the existing ROW. Therefore, the DEIR is correct only with respect to Alternative 3 when it states that “[the proposed project and alternatives] would ...have a negligible impact upon existing groundwater supplies and processes.”⁶⁴ Since Alternative 3 will have a negligible impact upon existing groundwater supplies, and Alternatives 1, 2, and 6 will have potentially significant adverse impacts on groundwater, Alternative 3 is the environmentally superior alternative.

O19-20
cont.

IV. THE DEIR DOES NOT ADEQUATELY ADDRESS THE SERIOUS ADVERSE IMPACTS THAT ALTERNATIVES 1, 2, AND 6 WILL HAVE ON RECREATION, CULTURE, AESTHETICS AND ENVIRONMENTAL VALUES IN THE SENTINEL BUTTE (ANTELOPE) VALLEY.

Although the Alternative 2 and 6 ROW will bisect the Sentinel Butte Valley (also referred to as the Antelope Valley), the DEIR does not address the cultural, recreational and aesthetic impacts those alternatives will have on this area. Land within the Sentinel Butte Valley is privately owned land; however, there is testimony on the record from the Public Meeting that the land is regularly utilized not only by landowners, and members of the local community as well for the land’s scenic value and for active recreation. Furthermore, there is testimony on the record that the land has historic value as well. Specifically, on May 1, 1920, the Sentinel Butte Valley was home to the “Valley of the Sun” gathering. Virtually all of this cultural, aesthetic and recreational value will be destroyed and lost forever by construction of the Alternative 2 or 6 ROW. The DEIR’s failure to address these impacts renders the DEIR insufficient.

O19-21

CEQA Guideline § 15126.2 mandates that an EIR must consider and discuss significant environmental impacts. Specifically, an EIR must consider the human use of the land, historical resources and scenic quality.⁶⁵ Although the DEIR does include these sections – Aesthetics (Section 4.1), Historical Resources (Section 4.5) and Recreation (Section 4.13) – these sections are inadequate. As discussed above, “the purpose of an EIR is to provide...the public in general with detailed information about the effect which a project is likely to have on the

⁶⁴ 4.8-14
⁶⁵ CEQA Guideline § 15126.2(a).

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 23

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 24

environment.⁶⁶ The Aesthetics, Historical Resources, and Recreation sections of the DEIR do not meet these standards. The failure of the DEIR to include an analysis of the impacts to the aesthetics, recreation and cultural resources of the Sentinel Butte Valley means that the public cannot adequately evaluate the environmental impacts of Alternatives 2 and 6 in comparison to the other Alternatives. The very purpose of having an EIR has not been satisfied; therefore, the DEIR is insufficient

O19-21
cont.

V. THE DEIR SIGNIFICANTLY OVERESTIMATES THE AESTHETIC IMPACTS OF ALTERNATIVE 3 BECAUSE IT FAILS TO RECOGNIZE THAT MUCH OF THE TRANSMISSION LINES WILL BE PLACED IN EXISTING UTILITY ROW

According to the DEIR, visual impacts from Alternative 3 “would generally be similar to or less than those for the Proposed Project.”⁶⁷ The DEIR does not mention, nor address, that when compared to Alternatives 1, 2, and 6, Alternative 3 is creating the least amount of new aesthetic impact. Furthermore, the DEIR does not address that where the Alternative 3 ROW utilized the existing ROW the aesthetic impacts of the transmission lines and towers will be lessened.

O19-22

Alternative 3 will create the least amount of new aesthetic impacts when compared to all other alternatives. As discussed above, Alternative 3 requires the acquisition of the least amount of new ROW (i.e. 9.7 miles compared to 17.4 miles, 12.2 miles and 12.4 miles). Most of the new ROW for Alternative 3 is located in a mountainous area where visibility is limited and the ROW does not impact the view from any roads, homes or scenic vistas. The shorter new ROW means that Alternative 3 will require the fewest number of miles of new transmission lines and poles, and, in turn, will create the least amount of new aesthetic impacts.

People are accustomed to seeing the transmission lines and poles along the existing ROW the only portion of Alternative 3 that will be in close proximity to any significant number of people. Furthermore, updating the transmission lines and towers along the existing ROW will actually reduce the aesthetic impacts of the existing ROW. The new transmission poles are taller than the old towers so the transmission lines will not only be higher in the air but more difficult to see. Additionally, due to upgrades in transmission towers, the existing ROW will require fewer poles that will be mostly inconspicuous mono-poles replacing large and aging lattice towers. The visual simulations provided in the DEIR demonstrate that rebuilding the existing infrastructure in the ROW will substantially reduce the current aesthetic impacts.⁶⁸

⁶⁶ Cal. Pub. Resources Code § 21061.
⁶⁷ 4.1-54.
⁶⁸ 4.1-27 through 4.1-37

VI. THERE ARE ADDITIONAL REASONS WHY ALTERNATIVE 3A IS THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE.

a. Alternative 3a Is A Practically Superior Alternative Because There Is No Significant Or Organized Opposition To The Alternative And It Would Allow SCE To Commence Construction Much Earlier Than Any Other Alternative.

There is no significant or organized opposition to Alternative 3a. If this project is as important as SCE indicates, then SCE should want the project to be completed as soon and as efficiently as possible. Choosing a route with very limited, if any, opposition will minimize the risk of lawsuits or other delays in the approval process. Prompt approval will allow SCE to commence construction potentially years earlier than if any other alternative were chosen. The other alternatives have serious adverse and unmitigable impacts that have not been adequately addressed in the DEIR and well organized and well funded opposition to ensure those impacts are addressed. Most importantly, from the comments given at the Public Meeting, it is obvious that many of the people affected by Alternatives 1, 2, and 6 passionately feel that they will lose their cherished agricultural lifestyles and the legacy that their families have handed down through generations. Those are more powerful motivators for a lawsuit than money because they are irreplaceable and no condemnation award can satisfy them. If Alternative 3a can be constructed much more quickly than any other alternative the total Alternative 3a project cost will ultimately be lower for the ratepayers.

O19-23

b. Alternative 3a Is The Environmentally Superior Alternative Because It Will Require Replacement Of The ROW Through Stone Corral Ecological Reserve – Work That Will Have to Be Done Eventually.

Alternative 3a can solve an existing environmental problem. The current Big Creek 1 and 3 Rector 220kV transmission line includes approximately 1.5 miles within the Stone Corral Ecological Reserve. Eventually that section of line will require repair or replacement due to the age of the equipment and the difficulty of maintaining that section on a regular basis due to environmental constraints. That inevitable work on the existing line will eventually involve the type of ecological damage that is described in the DEIR discussion of Alternative 3. Therefore, choosing another route merely defers, rather than avoids, the environmental damage in the Stone Corral Ecological Reserve. The other Alternatives should properly be considered as having a greater environmental cost than Alternative 3. In determining the total environmental impact of each Alternative the DEIR should properly include the environmental damage that will ultimately be caused by rebuilding the line through the Stone Corral Ecological Reserve to any environmental impacts of building the other Alternative. Implementation of a new Mitigation

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 25

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 26

Measure requiring SCE to route the existing transmission lines plus the new lines around the Stone Corral Ecological Reserve and remove the existing equipment from the Reserve will reduce the impacts of Alternative 3 described in the DEIR to less than significant. That approach will also eliminate further risk to the Ecological Reserve by permanently relocating the existing line from the Reserve to the less ecologically sensitive Alternative 3a route.

c. Alternative 3a Is The Environmentally Superior Alternative Because It Will Require Replacement Of Existing Big Creek 1-Rector And Big Creek 3-Rector 220kV Transmission Lines – Work That Will Have To Be Done Eventually And That Will Improve Safety In The Community.

While there is some historic value to the existing Big Creek 1-Rector and Big Creek 3-Rector 220kV transmission lines in the existing ROW, there are many good reasons to rebuild those lines. The lines and all of the support structures are old and worn and they present the very real danger of unpredictable failures. Those inevitable failures will certainly cause power outages and will potentially cause significant direct damage if lines or towers fall into populated areas. Rebuilding the approximately 14.6 miles of existing transmission lines included within the Alternative 3 ROW will lessen these risks. As described above, the new poles and towers will be taller and less frequent. That will reduce the amount of land occupied by the structures and will substantially reduce the aesthetic impact of the support structures. When the transmission lines are higher off the ground, impacts from the powerline noise, electromagnetic field and interference with other uses of the ROW will be reduced from the current condition. Together, the reduced risk and the reduced impact will ultimately increase the property values of those burdened by the existing ROW.

Importantly, rebuilding the line will adhere to the “Garamendi Principles” and the local policies that prefer upgrading existing utility infrastructure rather than establishing new right of way corridors. In 1988, recognizing both the growing importance of transmission with the interconnection of independent power producers and the escalating conflicts between transmission-owning and transmission-dependent utilities, the California Legislature passed Senate Bill (SB) 2431 (Stats. 1988, Ch. 1457), now referred to as the “Garamendi Principles,” which contained the following relevant finding concerning the role of transmission in California’s future development:

The Legislature further finds and declares that the construction of new high-voltage transmission lines within new rights-of-way may impose financial hardships and adverse environmental impacts on the state and its residents, so that it is in the interests of the state...to accomplish all of the following:



O19-23
cont.

- 1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically feasible.

Adherence to the Garamendi Principles would not only upgrade 14.6 miles of existing ROW, but would also prevent construction of between 12.2 and 17.4 additional miles of new utility ROW through high value orchard plantings and the significant environmental effects that would accompany that construction. While each of the other Alternatives involve rebuilding some portion of the existing line, Alternative 3 should be preferred because it will rebuild the greatest length of existing line. Therefore, Alternative 3 or Alternative 3a best serves the goals of the Garamendi Principles.

CONCLUSION

In conclusion, the DEIR concludes that Alternative 2 is the environmentally superior alternative only because the DEIR fails to understand and properly document the significant and unmitigable impacts of Alternative 2 on Land Use, Planning and Policies; Agricultural Resources; Hydrology and Water Quality; Aesthetics; Cultural Resources; Recreation; and, Economic and Social Effects. In each of these mandatory categories of the DEIR the actual adverse impacts of Alternative 2 are equal to or worse than any of the other Alternatives.

The DEIR also fails to understand and properly document that Alternative 3 has insignificant impacts on Land Use, Planning and Policies; Agricultural Resources; Hydrology and Water Quality; Aesthetics; Cultural Resources; Recreation; and, Economic and Social Effects. In each of those categories Alternative 3 has significantly less adverse impacts than any of the other Alternatives. The only significant impacts of Alternative 3 as designed by the applicant are the biological impacts of construction within the Stone Corral Ecological Reserve. The CPUC has received detailed additional comments from other parties outlining a small alternative route around the Reserve that will solve that problem but even if Alternative 3 is built as designed, it will be within the existing ROW and following the existing transmission lines through the Ecological Reserve. Therefore, the impacts of transmission lines and maintenance within the Reserve are not entirely new.



O19-23
cont.



O19-24



Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
July 31, 2009
Page 27

We encourage the CPUC to recognize the serious negative impacts on the local communities that would be caused by the new ROW included within Alternatives 1, 2 and 6. The best choice for the CPUC with the least environmental impacts is some version of Alternative 3.

Thank you for your consideration.

Very truly yours,


Christopher L. Campbell
BAKER MANOCK & JENSEN, PC

CLC:tlw

DMS: 755253_1

Memorandum

Date: July 31, 2009
To: Doug Carman, Paramount Citrus Project: 14180.001
From: David Bean, PG, CHg cc:

Subject: Potential Groundwater Impacts from Proposed Southern California Edison San Joaquin Cross Valley Loop Alternative Routes 2 and 6

As requested by James Jordan of Paramount Citrus (Paramount), AMEC Geomatrix, Inc. (AMEC), has reviewed the Southern California Edison Draft Environmental Impact Report (DEIR) for the proposed San Joaquin Cross Valley Loop. In particular, AMEC focused on potential impacts to groundwater resulting from installation of high voltage electrical power towers and associated transmission lines, pads and roads along Alternative Routes 2 and 6 as presented in the DEIR (Figure 1).

Groundwater is the primary source of drinking water for most communities in California and the major source of irrigation water for most agricultural areas. In the Valley, groundwater is typically found in deep alluvial aquifers comprised of sand and gravel, and groundwater recharge is primarily from percolation of water from streams, rivers, and applied water. In the foothills on the east side of the Valley, groundwater is more typically found in fractured bedrock and groundwater recharge occurs through percolation of rain and snow melt through fractures in the bedrock. Although the western half of the new rights-of-way of Alternative Routes 2 and 6 overlie significant alluvial aquifers, the eastern half of Alternative Routes 2 and 6 are located in areas where groundwater is found primarily in fractured bedrock characteristic of the foothills, or in areas consisting of shallow alluvial aquifers over fractured bedrock.

Previous Investigations

In 2008, AMEC conducted an extensive survey of groundwater resources in the vicinity of Rayo Ranch on behalf of Paramount (AMEC, 2008). Project Alternative Routes 2 and 6 cut directly through this study area as they extend from the existing Big Creek 1-Rector/Big Creek 3-Rector 220 kilovolt (kV) transmission line right-of-way along Road 148 eastward into the foothills to connect to the existing Big Creek 3-Springville/Big Creek 4-Springville 220 kV transmission line (Figure 1).

Groundwater beneath the Rayo Ranch area (located in the path of both Alternative Routes 2 and 6 west of Colvin Mountain) is found in a shallow alluvial aquifer overlying a fractured bedrock aquifer. The alluvial aquifer ranges from just a few tens of feet thick at the base of Colvin Mountain to approximately 250 to 300 feet thick near Road 148.

East of Colvin Mountain (where Alternative Routes 2 and 6 converge), groundwater beneath the Cottonwood Creek (Elderwood/Dutch Colony) and Antelope Valley (including Sentinel Butte)

O19-25

AMEC Geomatrix, Inc.
1281 E. Alluvial Avenue, Suite 101
Fresno, California
USA 93720-2659
Tel (559) 264-2535
Fax (559) 264-7431
www.amecgeomatrixinc.com





Memorandum
July 31, 2009
Page 2 of 6

area is also found in a shallow alluvial aquifer overlying a fractured bedrock aquifer. On this eastern portion of Alternative Routes 2 and 6 the alluvial aquifer ranges from just a few tens of feet thick to only a few feet thick at the base of the foothills.

The limited well construction data available for the Cottonwood Creek and Antelope Valley area indicate that the wells are relatively shallow and are completed in alluvial and fractured bedrock. Information provided by farmers in the area east of Colvin Mountain indicates that groundwater supply is extremely inconsistent. Wells in some areas have good yields while many wells that are drilled provide no usable water. This is consistent with the results of our surveys and, in our experience, is characteristic of the Sierra foothill region. Groundwater is not consistently available across the small alluvial-filled valleys. Some areas are underlain by fractured bedrock filled with water while other areas are underlain by dry fractures or fractures isolated from recharge areas so they do not have enough groundwater flow or storage to provide a long-term supply. Relocating a well, even a short distance in a fractured bedrock aquifer, can be very unpredictable.

Groundwater elevation data collected by the California Department of Water Resources (DWR) and the United States Geological Survey (USGS) were used to prepare long-term hydrographs from 1980 to 2007 for over 60 wells in the area (Figure 2). Some of our more important observations are:

- Groundwater elevations tend to vary seasonally 5 to 10 feet, rising in the wet winter months and falling in the dry summer months when wells are pumped for irrigation.
- Groundwater elevations also vary in response to decadal-scale drought cycles, rapidly declining 20 to 30 feet during drought periods and quickly recovering during wet periods.

The same groundwater elevation data were used to evaluate seasonal (Fall and Spring) groundwater flow patterns over 25 years. Some of our more important observations are:

- Groundwater flows generally from east to west from the foothills areas (i.e. Cottonwood Creek drainage and Antelope Valley) to the Valley trough west of Highway 99 (Figure 3).
- The groundwater gradient is consistent in direction and magnitude during both Fall and Spring and during wet and dry periods.

In the Cottonwood Creek drainage area there is a strong correlation between groundwater elevation data from DWR and USGS, stream flow data from the USGS, and precipitation data from the National Oceanographic and Atmospheric Administration (Figure 4). This indicates that the Cottonwood Creek drainage and Antelope Valley are very important groundwater recharge areas on the east side of the Valley.

The data also show a strong correlation between groundwater elevations wells in the Elderwood area, wells south of Colvin Mountain, and wells west of Colvin Mountain (Figure 2). This

O19-25
cont.



Memorandum
July 31, 2009
Page 3 of 6

indicates that the foothill area on the east side of the valley is an important recharge source for local wells, including those south and west of Colvin Mountain, and many square miles of productive farm land.

The data show that depth to groundwater has historically ranged from 10 to 80 feet below ground surface in the Elderwood area (Figure 5). However, as recently as 2007, depth to groundwater was between 10 and 40 feet, depending on location.

Our conclusion is that the local aquifer system is not laterally extensive and does not have diverse sources of recharge. The data indicate the local aquifer has a limited recharge area because the local effects are so quickly evident. The seasonal variation in groundwater elevations, the decline during drought periods and subsequent recovery during wet periods indicates that local recharge is extremely important to the local aquifer system. As a result, in this aquifer system even a small impairment of the local recharge capability can have a significantly adverse impact.

Potential Groundwater Impacts

At the request of Paramount, we have reviewed the DEIR with particular focus on the potential impacts Alternative Routes 2 and 6 may have on groundwater resources and the availability of agricultural irrigation supplies in the vicinity of the Rayo Ranch, the Elderwood area, and Antelope Valley.

As a result of this review, we believe the DEIR is deficient because it fails to adequately address potential significant adverse impacts to groundwater. These impacts result from the installation of power poles and service roads in several areas, particularly along the eastern alignments of Alternative Routes 2 and 6 in the Elderwood and Antelope Valley areas.

DEIR Pages 2-20 to 2-33 describe the poles, towers, and roads required for the project. Foundations for tubular power poles will be 6 to 10 feet in diameter and 20 to 60 feet deep. Groundwater is at a depth of 10 to 40 feet along much of the alignment. Dewatering may be necessary to construct foundations for as many as 38 poles. Dewatering in a limited aquifer system during a period of drought may adversely affect local water supply wells and may permanently damage the aquifer system through compaction and sealing of alluvial and fractured bedrock in the vicinity of the borings. In addition, once cemented in place, the foundations are likely to become permanent local barriers to recharge and groundwater flow in both alluvial and fractured bedrock. Because the transmission of groundwater through the fractured bedrock cannot accurately be mapped, the impact of pouring cement into the fractures intersected by an individual foundation cannot be predicted with any certainty. Once the concrete is poured and the impacts are known, however, they are very hard to reverse. It is likely that the concrete will cut off the downstream flow in the sealed fractures, or possibly redirect the water flowing in the sealed fractures to some other fracture or fracture system. Any wells relying on those sealed fractures will experience decreased flow or possibly a complete loss of flow. Because it is virtually impossible to determine the route water takes to a well, all wells in the vicinity of a new foundation must be considered at risk.

O19-25
cont.



Memorandum
July 31, 2009
Page 4 of 6

DEIR Pages 3-10 to 3-12 describe Alternative Route 2 and indicate that new permanent roads will cover over about 28 acres of land. Approximately 5 acres of new road surface appear to be in the recharge areas of Elderwood area and Antelope Valley. These 5 acres of graded and compacted road may have an adverse impact on the rate water can recharge. As a result, more water may run off in rain events and may be lost to the aquifer. An additional 9 acres will be "permanently disturbed." The definition of "permanently disturbed" includes areas where other impervious surfaces are located. Therefore, these 9 acres may further reduce recharge capacity.

DEIR Pages 4.8-4 to 5 and 4.8.14 describe the sediments beneath the Alternative Routes as consisting of "three stratigraphic units: continental deposits, older alluvium, and younger alluvium. For the most part, assessable groundwater occurs within an unconfined state throughout the study area." The DEIR also indicates "The groundwater basins underlying the study area are relatively large, predominantly unconfined, and heavily impacted by existing agricultural demands. Groundwater use is not proposed for the Proposed Project or alternative, and they would otherwise have negligible impact upon existing groundwater supplies and processes." These statements may be reasonable for the portion of the project on the Valley floor. However, the DEIR fails to consider the shallow alluvial and fractured bedrock aquifers at the base of the foothills (i.e. the Elderwood area and Antelope Valley). As described above, the local aquifer system beneath this area is not laterally extensive and does not have diverse sources of recharge. This local aquifer system is also being put to extensive beneficial use for domestic and agricultural supply. Dewatering for foundations would exacerbate local overdraft during the current drought conditions, and installation of foundations may have significant impacts on groundwater supplies and processes by reducing recharge and disrupting groundwater flow.

Particular Areas of Concern

DEIR Appendix C Pages 17-20 Alternative Route 2 – Structures 55-73 are located in the Rayo Ranch area east of Colvin Mountain. Along this alignment the shallow alluvium aquifer thins from a few hundred feet thick to only a few tens of feet thick. Approximately 2,700 feet of new roads will be required to construct 20 structures. Installation of roads, pads, and power poles may reduce recharge potential and, as discussed above, create barriers to groundwater flow by sealing fractures, especially on the eastern end of the alignment. Available data suggest a significant amount of groundwater flow occurs through fractures and into the alluvium in this area, so the concrete foundations can potentially block a significant amount of the flow, which would adversely affecting wells required to irrigate local farms.

DEIR Appendix C Pages 20-21 Alternative Route 2 – Structures 74-78 are located on the west side of Colvin Mountain overlying a primarily fractured bedrock aquifer. Approximately 2,100 feet of new roads will be required to construct 4 structures. Installation of roads, pads, and power poles may reduce recharge potential and create barriers to groundwater flow by sealing bedrock fractures. Available data suggest a significant amount of groundwater flow occurs through fractures in this area, so if concrete foundations are installed in the fractured

O19-25
cont.



Memorandum
July 31, 2009
Page 5 of 6

bedrock aquifer it is likely that they will inhibit a significant amount of groundwater flowing west into the Rayo Ranch area.

DEIR Appendix C Pages 21-23 Alternative Route 2 – Structures 78-91 are located in Mud Springs Gap along the north of Colvin Mountain. This is an area of shallow alluvium overlying fractured bedrock. Approximately 4,000 feet of new roads will be required to construct 13 structures. Installation of roads, pads, and power poles may reduce recharge potential and create barriers to groundwater flow by sealing fractures. Available data suggest a significant amount of groundwater flow occurs through fractures in this area, so if concrete foundations are installed in the fractured bedrock aquifer it is likely that they will inhibit a significant amount of groundwater flowing through the Mud Springs Gap and adversely affecting wells required to irrigate local farms. In this area it may not be possible to construct new wells that will effectively replace any impacted wells. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.

DEIR Appendix C Pages 23-25 Alternative Route 2 – Structures 92-100 are located in the Elderwood area. This is a significant recharge area when water is present in Cottonwood Creek. Structure 93 is located adjacent to the main channel of Cottonwood Creek. Installation of roads, pads, and power poles may reduce the recharge potential of the area and create barriers to groundwater flow in both alluvium and fractured bedrock. In addition, several water supply wells are located along this section of alignment. Wells located in the path of alignment will need to be relocated. As indicate above, the availability and location of groundwater in this area is unpredictable and difficult to determine, so relocating wells will likely be very challenging, expensive, and potentially impossible. The impediment to groundwater flow, especially in the bedrock, should be considered significant because there is no way to ensure that it does not cause adverse impacts. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.

DEIR Appendix C Pages 25-27 Alternative Route 2 and Alternative Route 6 – Structures 101-115 are located in Sentinel Butte and Antelope Valley. This is a relatively undisturbed recharge area with several ephemeral streams. Approximately 6,500 feet of new roads will be required. Installation of roads, pads, and power poles may reduce the recharge potential of the area and create barriers to groundwater flow in the primarily fractured bedrock aquifer. Several water supply wells, including a high yield "wagon-wheel" or radial collector well, reportedly will need to be relocated along this section of alignment. A radial collector well has a large diameter central caisson with horizontal perforated pipes extending radially into a thin shallow aquifer. Typical radial collector wells now cost between \$3,000,000 and \$5,000,000 to construct. While it is possible to install a new radial collector well in this area, there is no guarantee that it will have the desired yield. As indicated above, the availability and location of groundwater in the Sentinel Butte/Antelope Valley area is unpredictable and difficult to determine, so relocating wells will likely be very challenging, expensive, and potentially impossible. The impediment to groundwater flow, especially in the bedrock, should be considered significant because there is no way to ensure that it does not cause adverse impacts. In addition, impacts to recharge and groundwater flow in this area may impact downgradient areas to the west and south.

O19-25
cont.



Memorandum
 July 31, 2009
 Page 6 of 6

Conclusion

While the individual impact of certain individual structures on groundwater recharge in the Rayo Ranch, the Elderwood area, and Antelope Valley may be less than significant, the cumulative impacts of the roads, multiple pads, deep foundations and multiple structures on groundwater recharge cannot be so easily dismissed. The DEIR does not acknowledge or address the significant risk and negative impact that sealing of one bedrock fracture by a single concrete foundation in the Elderwood area and Antelope Valley can have on groundwater flow. Replacement of wells in this thin alluvial and fractured bedrock aquifer is difficult and costly.

In summary, the DEIR is deficient because of the following:

- The DEIR comparison of potential groundwater impacts from the various alternatives is deficient.
- The DEIR fails to acknowledge the risks of construction on groundwater recharge and resources in the foothill areas of Alternative Routes 2 and 6.
- The DEIR also fails to acknowledge the risks of construction of roads and foundations to existing water supply wells in the shallow alluvium and fractured bedrock aquifers beneath Alternative Routes 2 and 6.

Attachments: Figure 1 – Location Map and Alternative Routes 2 and 6
 Figure 2 – DWR Well Hydrographs
 Figure 3 – Water Surface Elevation – Spring 2007
 Figure 4 – Correlation between Precipitation, Stream Flow, and Groundwater Elevation in Cottonwood Creek Valley
 Figure 5 – Hydrographs of Selected Wells Showing Relationship between Groundwater in Cottonwood Creek Valley, Antelope Valley, and West of Colvin Mountain

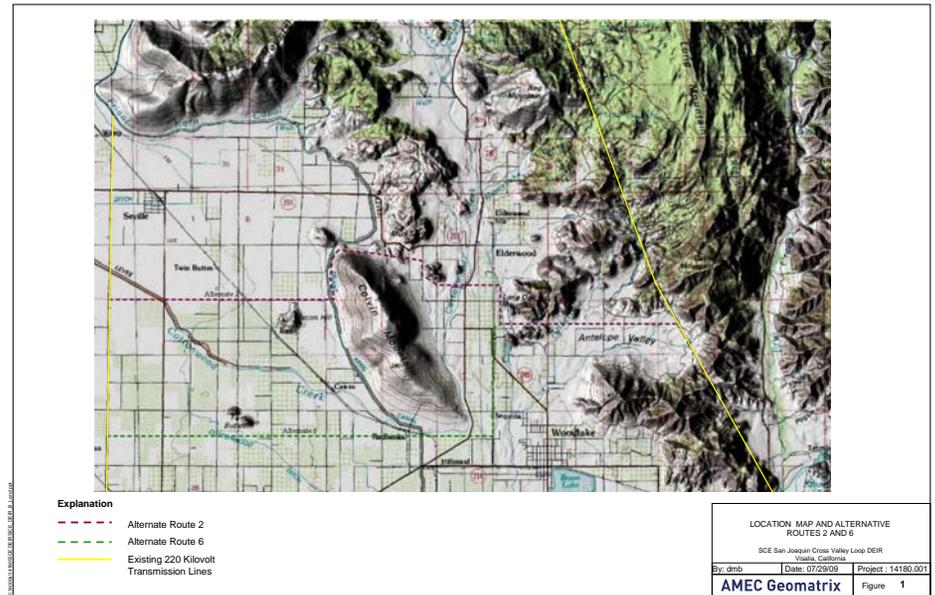
References

AMEC Geomatrix, Inc., 2008, Evaluation of Groundwater Resources, Paramount Citrus Rayo Ranch, Tulare County, California, November (AMEC, 2008).
 Croft, M.G. and Gordon, G.V, 1968, Geology, Hydrology, and Quality of Water in the Hanford-Visalia Area, San Joaquin Valley, California, USGS Open-File Report 68-67 (Croft and Gordon, 1968).

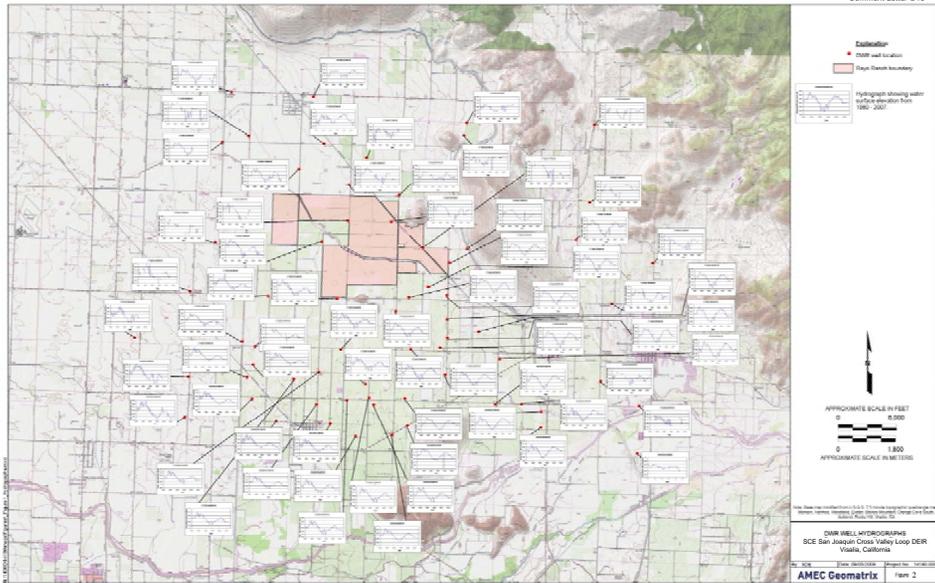


O19-25
 cont.

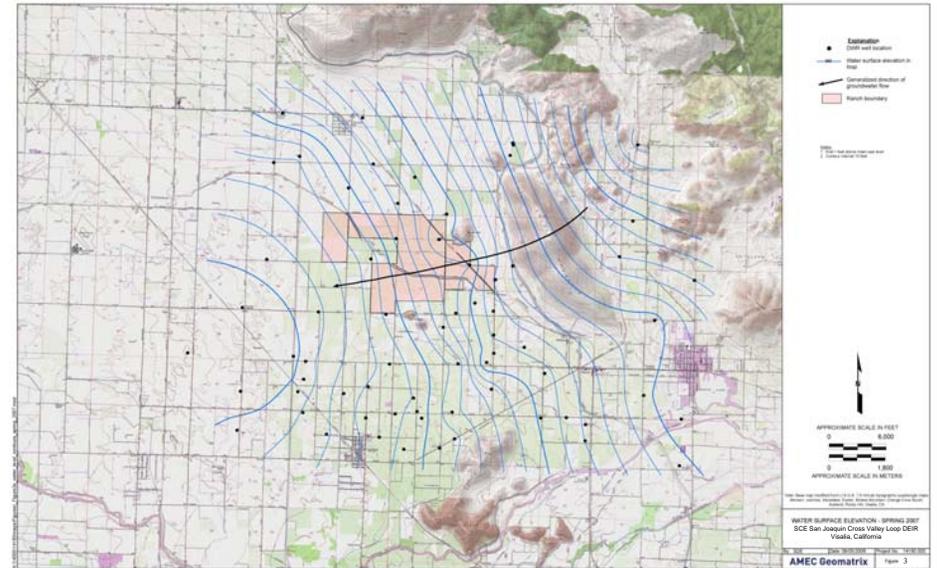
Comment Letter O19

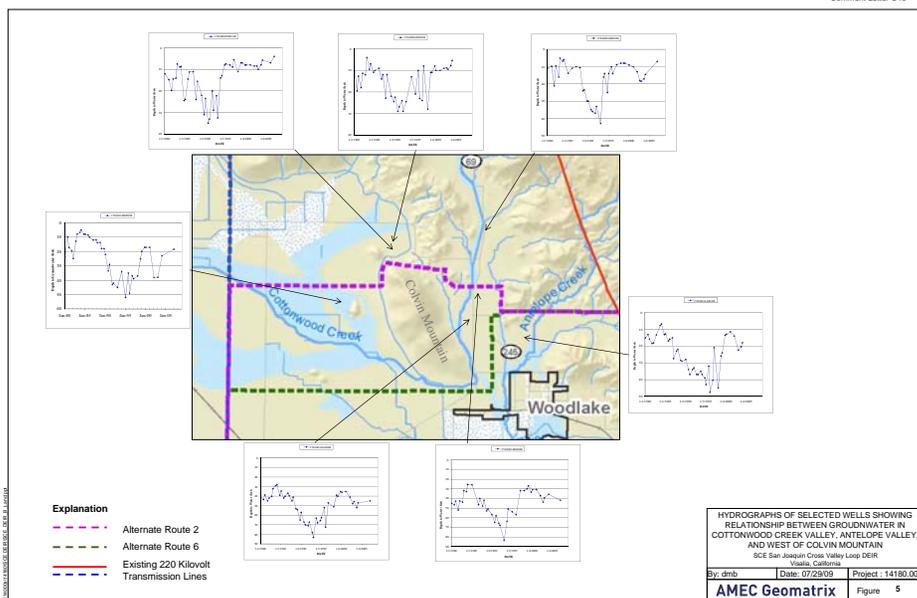
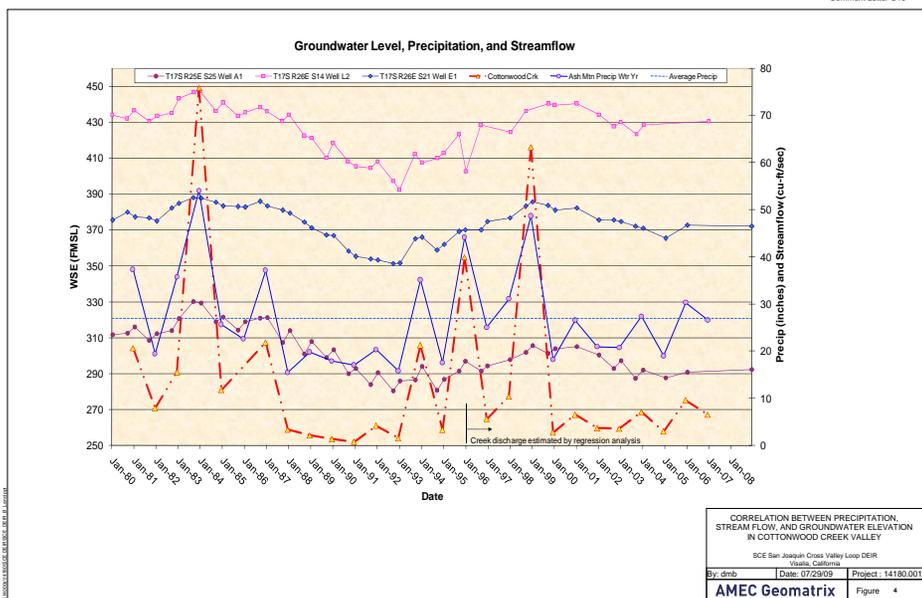


Comment Letter O19



Comment Letter O19







CALIFORNIA FARM BUREAU FEDERATION
OFFICE OF THE GENERAL COUNSEL

2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5650 · FAX (916) 561-5691

Comment Letter O20

Comment Letter O20

July 31, 2009

VIA U.S. MAIL and E-MAIL

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
E-mail: sjxvl@esassoc.com

RE: Comments of the California Farm Bureau Federation and the
Tulare County Farm Bureau on the Draft Environmental Impact
Report for Southern California Edison's San Joaquin Cross Valley
Loop 220kV Transmission Line Project

Dear Mr. Uchida:

The Tulare County Farm Bureau and the California Farm Bureau Federation (collectively "Farm Bureau")¹ appreciate the opportunity to comment and recommend changes to the Draft Environmental Impact Report ("DEIR").

Farm Bureau submits these comments with a focus on the completeness of the DEIR's assessment to the impacts to Agricultural Resources ("Agriculture"). Although the DEIR complied with sections a) and b) of the checklist for Agriculture contained in Appendix G to the CEQA Guidelines, it is Farm Bureau's position that a more thorough analysis is required to comply with section c). Section c) requires an assessment of whether the project would "involve other changes in the existing environment which, due to their location or

¹ Tulare County Farm Bureau is a member-controlled, grassroots policy driven organization. Founded in 1916, it currently has over 2,700 members from Tulare County. It is governed by a 23 member Board of Directors and provides a voice for promoting the common interests of farmers and ranchers in Tulare County. The California Farm Bureau Federation is a voluntary, non-profit corporation representing approximately 85,000 members in 53 county Farm Bureaus (including Tulare County Farm Bureau) from 56 counties in the State.

NANCY N. McDONOUGH, GENERAL COUNSEL
ASSOCIATE COUNSEL

CARL G. BORDEN · KAREN NORENE MILLS · RONALD LIEBERT · JOHN R. WEECH

nature could result in conversion of Farmland, to non-agricultural use." Such an assessment requires a more pragmatic understanding of agricultural operations and activities in the project area to assess how the acreage will ultimately be affected and potentially converted to non-agricultural use. There are several changes that would be required for agriculture that should be analyzed.

First, Farm Bureau sets forth a number of impacts, some identified in the DEIR and some not, which will create greater acreage impacts than are currently recognized. Second, there are specific changes recommended regarding the feasibility of the mitigation measures for certain identified impacts.

Only recently the California Public Utilities Commission issued a Decision recognizing the importance of carefully and thoroughly reviewing the impacts of a project and how to address them should it choose to go forward with it.² At page 21 of the Decision, the Commission notes that "There is a sort of grand design in CEQA: Projects which significantly affect the environment can go forward, but only after the elected decision makers have their noses rubbed in those environmental effects, and vote to go forward anyway." These comments are intended to assist in a full review of the impacts from the proposed transmission line. The broader impacts to agricultural resources explained below underscore the requirement of CEQA to identify the alternative with the least impacts to those resources. With PACE's proposal of Route 3A, which eliminates the impacts to biological resources, the only remaining focus should be on what can be done to reduce impacts to those agricultural resources which must be assessed by CEQA.

State Policy Supports a Thorough Assessment of the Projects' Impacts to Agriculture

CEQA's mandate to review the impact of Southern California Edison Company's proposed San Joaquin Cross Valley Loop Transmission Project (SCE Loop) on agriculture is part of the fabric of and reflective of state policies that indicate a statewide concern for a strong agricultural economy by conserving the ultimate resource, productive lands. You can't have one without the other. The preservation of the maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources. (Government Code Section 51220(a)) Premature and unnecessary development of agricultural lands to urban uses continues to have adverse effects on the availability of such lands for agricultural uses and on the economy of the state. (Resolution Chapter 81, Statutes of 1981) Today more than six billion people rely on food grown on just 11 percent of the global land surface. Even less ground – a scant 3 percent of the Earth's surface – offers inherently fertile soil. So, it is with such an overall backdrop that Farm Bureau emphasizes the need to carefully review the overall agricultural community in the SCE Loop area in order

² D.09-07-024, July 9, 2009, Order Modifying Decision 08-12-058 and Denying Hearing of Decision as Modified.

that a fair understanding of the impact to agriculture is carried forward in the Final EIR. As U.S. President Franklin Roosevelt said, "The history of every nation is eventually written in the way in which it cares for its soil."

The commodity make-up of Tulare County agriculture in the affected portion of the County is very stable having been in existence for more than a century. Orchard crops that dominate the community of the proposed project provide one of the most stable economies in California agriculture and also require extensive support industries for its historic and future sustainability, as compared to other commodities within the County and balance of the state. That dependency is evident in the goals and policies of Tulare County's General Plan. To view the loss of agricultural land for this project simply in the context of the total number of acres within the right-of-way without assessment of impacts resulting from it, would be a tragic mis-calculation and an injustice to the sustainability and economic vitality of the County.

Tulare County is the second-leading producer of agricultural commodities in the United States. In 2008 the total gross production value was over \$5 billion. Agriculture is the largest private employer in the County with farm employment accounting for nearly a quarter of all jobs. Processing, manufacturing, and service to the agriculture industry provide many other related jobs. Six of the top fifteen employers in the County are food handling or processing companies, which includes fruit packing houses and dairy processing plants. 1 in every 5 jobs in the San Joaquin Valley is directly related to agriculture. Tulare County agribusiness is dynamic and reflects the changing demands of consumers and export markets.

The DEIR recognizes in various sections individual components that are integral to the long history of agriculture in the project area, but fails to connect the pieces with an overall understanding of how the construction of the line can affect the viability of the resources. The Tulare County General Plan is referenced extensively and the historical significance of agricultural community is acknowledged (page 4.5 – 16), but the analysis stops at issue spotting.

The DEIR Does Not Sufficiently Address the Likelihood That Farmland Would be Converted to Non-Agricultural Use

The DEIR takes a fairly strict approach to the impacts on agriculture on the various routes. It does not adequately identify, address or define impacts to Farmland. Nor does it take into consideration agricultural practices and impacts to those activities such as pest abatement, dust control management, and aerial applications that may be restricted to a great degree under and around the lines, which may cause additional conversion of farmland to non-agricultural use. Because all the routes analyzed in the DEIR will have some impact to agriculture, the route recommended for use to construct the SCE Loop should minimize those impacts.

The DEIR has equally underestimated the impacts by the alternatives, for the matters addressed below. The result of such treatment is, that the greater amount of new agricultural acreage and operations affected by the transmission line, the greater will be the ancillary effects on agriculture.

The specific areas are raised and explained as follows:

1. Disruption of Soil During Construction (Page 4.2-11)

Each alternative will subject various levels of the high quality soils in the project area to disruption. Farm Bureau has proposed a suggested process for mitigation as discussed later, yet there may be a risk that soils cannot be properly restored to the current status that earmarks it as capable of high quality production. There is a possibility permanent impacts could be sustained long after construction and remediation.

O20-1

2. Dust Emission Impacts to Crops

Dust control is an issue not only as an air quality concern but as a pest control issue in orchards and other crops. Uncontrolled dust results in increased use of pesticides, because dust acts as a carrier for pests and diseases. In organic operations extensive use of approved materials is needed and water is used to wash the leaves of the crops. Dust is not only a concern during construction, but also as a result of vehicle access in the right of way for maintenance. If a high-pressure wash is used to clean insulators in the course of normal maintenance, the wash water will need to be controlled to avoid the adjacent trees outside of the right of way. The impact of dust is recognized in mitigation measure 4.2-1b, but only in a very general way.

Dust impacts are mentioned in the DEIR only in the context of construction activities. In fact, unless properly managed, use of the access roads for the SCE Loop can permanently affect the crops in the area. The DEIR approaches the issues of dust with respect to the air emissions and air quality (Section 4.3). It does not address the impacts to the various crops that will be planted near the right-of-way or the access roads.

O20-2

There a number of major pests that are enhanced in their ability to cause economic damage to citrus trees and the fruit they produce by uncontrolled dust from dirt roads in proximity to orchards. California Red Scale is a major problem in the Central Valley. Also Spider Mites and Thrips become a problem with increased dusty conditions. (See The University of California Integrated Pest Management Bulletins, ipm.ucdavis.edu) Dusty conditions and their severity depend on the soil type, speed of vehicles using adjacent roads and the frequency of watering the dirt roads. Reduction of the speed of vehicles is the most cost effective action, especially during drought conditions when water is in

short supply. Where private ranch roads are used as access roads it will be nearly impossible to monitor the speed of the traffic or who uses the roads.

The measures that are recommended to address dust emissions (4.3-20, 21) may in fact create additional impacts for agricultural crops. If such areas are located within a field or orchard, the treatment may affect the resource and its viability. Discussion of methods to reduce dust need to take into account the impact the crop and the related cultural practices, whether treatment is a suppressant, additives or vegetation. Agricultural operations are subject to some very strict regulations regarding chemical use. Materials appropriate for use in one context may not be appropriate near food production. Vegetation as a suppressant, unless properly managed, can create ancillary problems to crop production, as it may propagate weed problems for the operation.

The types of crops grown in Tulare County are highly specialized and carefully managed. Thoughtful review of any changes to the area from a construction project is required in reviewing impacts. It can't be assumed that what works to maintain dust for air quality will work for neighboring crops.

Limiting impacts to crops from dust will depend on who and how access roads are used. It is not possible to monitor traffic on additional access roads. Although in some cases gates would be installed, much agricultural land is not fenced. For example, fences are not a common sight in orchards. The alternatives that create new easements and access roads also create greater impacts to crops.

3. Supply of Replacement Trees in Construction Areas (Page 4.2-12)

The DEIR team is to be commended for recognizing the significant impact that removal of trees within an existing orchard can have. But at the same time, the DEIR fails to recognize the extent of the issue. First, the problem is not applicable to only walnut and orange trees, but would apply to any permanent crop. Secondly, there are many operational impacts that will not be compensated when a permanent crop is disrupted, as could occur during construction. According to Farm Bureau members, cultural practices must be adjusted for young replants. Water and nutritional requirements are drastically different for young replants in contrast to mature trees. Spray applications vary as well. Younger trees, more vulnerable to attack, must be monitored more closely.

4. Compatibility of Agricultural Activities With the Line is Limited (Page 4.2-15)

The DEIR recognizes the constraints in the maintenance of walnut orchards under the transmission lines. It is not only walnut trees, however, which

O20-2
cont.

O20-3

O20-4

may be vulnerable to requirements associated with vegetation management. Tulare County's soil and climate support the opportunity to plant a variety of orchard crops as recognized in the DEIR. The placement of a line in areas that can support orchards will constrain future opportunities, as well as affect current operations.

Only walnut trees are addressed by the DEIR, but the constraints outlined by Edison for vegetation management make vulnerable the almonds, pomegranates, olives, citrus, stone fruit and other orchard crops in the potential ROW. Transmission lines create greater impacts in orchards than in other crops, because of the requirements for maintaining vegetation clearances around the lines. The DEIR and the Edison PEA address maintenance of orchards under and near the lines. Both indicate that trees will be allowed under the lines if maintained at 15 feet height. Lost in the translation is that to be maintained at 15 feet height, trees would have to be pruned every day or pruned below 15 feet in order to comply with such a requirement. Although Edison states that trees maintained at 15 feet can stay within the line, the form easement document provided by Edison makes no reference to any height allowance. (It is assumed the DEIR team has a copy of that document.) With the changes over the years to vegetation management requirements, it cannot be assumed that the authorization for planting of any particular tree crop will continue for a defined period. The DEIR should more fully assess the impact of the lines to other orchard crops.

CFBF and a number of County Farm Bureaus have worked with SCE and other utilities to find workable solutions to the requirements established by the CPUC and NERC for ensuring vegetation does not affect the transmission system. The trend over the years has been for the utilities to ask for ever increasing clearances between trees and lines. The key variability in trimming requirements is what the utilities mandate at time of trim rather than the clearance that must be maintained. Utilities have also been stricter about conducting the trimming under their direction, in contrast with periods when landowners did much of the pruning themselves. New requirements authorized by the North American Electric Reliability Corporation establish standards and penalties and also created vegetation management standards with which the utilities must comply.

The CPUC's standards for vegetation management are set forth in General Order 95. The Commission, in a Proposed Decision in Rulemaking 08-11-005, has indicated it will begin discussions in the future about vegetation management rules. It is not clear at this time how any changes will affect orchards.

For purposes of this DEIR, SCE should be required to include in their form easement that landowners will not be required to have their trees pruned below 15 feet. Otherwise, it should be assumed that tree crops other than just walnuts

O20-4
cont.

will, at some point, be vulnerable to elimination under transmission lines and such impacts should be incorporated in the analysis here.

O20-4
cont.

5. Water Availability and Quality Are Important Factors in the Sustainability of Crops Important to Tulare County

The categories of Farmland defined by the Department of Conservation are listed in the DEIR. Key to the categories of Farmland which are capable of supporting the widest variety of crops is water availability and as a corollary water quality. (Attached as Exhibit 1 is the explanation of the Important Farmland Mapping Categories and Soil Taxonomy Terms used by the California Department of Conservation) Irrigation of Farmland will be significantly impacted on certain properties, and the feasibility of replacing and relocating wells may not only be costly, but infeasible to replicate existing water availability and quality. Like the discussion on air quality, the DEIR addresses water quality but misses the possible impacts to agriculture from required replacement of irrigation systems.

O20-5

At page 4.8-13, the DEIR dismisses any concerns about water quality by stating that compliance with water quality issues are satisfied by meeting the federal, state and local standards. It fails to address the possibility of otherwise degrading water quality, which in fact could occur to agricultural water systems.

At page 4.2-16, the DEIR dismisses potential impacts to agricultural resources, since it would require replacement systems. It is assumed replacement of a well and water availability is simply a matter of moving the source from one location to another. (Page 4.7-23) The DEIR is incorrect in that assumption. Farm Bureau concurs with the DEIR comments of PACE on this matter. In addition, according to Farm Bureau members, certain properties in the analyzed Routes may rely on wagon wheel wells, which are essentially irreplaceable. The DEIR should acknowledge that potentially unmitigable impacts could occur to agricultural resources and convert them to non-agricultural use as a result of moving wells for irrigation.

6. Effects From the Line on Aerial Spraying Creates a Hazard and Affects the Sustainability of the Farmland (Page 4.7-4, 18)

The DEIR acknowledges that cultural practices of agriculture in Tulare County are dependent upon aerial application of materials to maintain the viability of the crop. In some cases helicopters are used for frost protection to maintain air temperatures. It recommends measures to assure the safety of the pilots for any new lines, but fails to recognize that Farmland subjected to new lines may be compromised. The DEIR needs to augment the risk of conversion of agricultural resources to recognize the impact on cultivated acreage from the addition of new lines.

O20-6

7. The Project Will Cause Growth And is Likely to Further Displace Agricultural Resources (Pages 4.11-6 and 4.2-15)

The DEIR makes too fine of a distinction between accommodating growth and inducing it. Once the line is upgraded the greater stability resulting from it will allow greater growth. It may not in and of itself cause growth but it is necessary for future growth of residential and industrial needs, creating additional pressures to convert Farmland.

O20-7

8. Any Traffic Management Should Include Recognition of Transferring Crops During Harvest Seasons (Page 4.14-7)

The DEIR recognizes construction will impact traffic, but does not appreciate likely impacts during the harvest season for various crops. During much of the year farming requires limited traffic to and from agricultural operations. When harvest commences increased equipment may be required and increase in trips to and from the properties may be needed. For example, walnuts are harvested in the fall and require shakers and sweepers to be moved into the orchard. When harvesting commences trailers with the walnuts will need to be transferred to a walnut huller and dryer. It is important that such transportation not be delayed to assure quality of the walnuts is preserved. Impacts for citrus may be even greater, as citrus is harvested about 11 months out of the year in the community. In construction areas there may be needs to keep forklifts, bin trailers and trucks and other equipment in the field and assure there is an ability to transfer them on the roads as part of harvest practices. Winter periods will require special attention as entrance to orchards may be delayed due to muddy conditions, and then require extra efforts to meet harvest needs. Any measures to manage traffic must be responsive to the concerns of agricultural operators.

O20-8

9. Mitigation for Various Land-Based Impacts Can Further Affect Agricultural Resources (Pages 4.4-32 and 4.4-35)

In addressing potential impacts to biological resources, the DEIR would require mitigation through acquisition of land that supports special-status plants or compensates for foraging habitat losses. Since the vast majority of underdeveloped land in Tulare County suitable for such purposes is agricultural land, there is a significant possibility that further impacts to agriculture would occur. That effect has not been taken into account, but can add to the economic concerns to agriculture as greater acreage would be used for non-agricultural purposes.

O20-9

The Foregoing Impacts Emphasize the Importance of Selecting A Route for the SCE LOOP That Minimizes Effects to Agricultural Resources – Route 3A by PACE Provides the Solution

Although the DEIR recognizes there are significant unmitigable impacts to agricultural resources, it does not convey the full effect that construction, maintenance and operation may have on the valuable, specialized crops that are inherent to Tulare County. Loss of productivity on Farmland as a result of the impacts will reduce profitability and may eliminate jobs in the community. As the comments herein address, contrary to the DEIR's general observation about compatibility between transmission and agriculture (page 4.2-14), there are a number of factors that create significant incompatibility issues between many agricultural crops and transmission corridors.

O20-10

The DEIR acknowledges that Route 3 would result in the least impacts on agricultural resources in comparison to other routes. The differences between the impacts on Route 3 and the others are even more pronounced once the factors listed above are taken into account. The DEIR does not recommend Route 3 as environmentally superior because of the biological resource impacts related to sensitive habitat in the Stone Corral Ecological Reserve. (Page 5-7)

PACE developed Route 3A to address the biological resource impacts and submitted sufficient details to the CPUC that it should be fairly considered. The DEIR has identified no other shortcomings associated with Route 3 that would exclude consideration of PACE's Route 3A.

Mitigation Measures That Should be Revised or Added to Account For Impacts to Agricultural Resources

1. Farm Bureau recommends establishment of an Agricultural Advisory Committee

Still pending at the time of submission of these Comments, is the Farm Bureau testimony in the CPUC evidentiary proceeding for the SCE Loop. Farm Bureau submitted testimony in the proceeding to address community values.³ The testimony is attached to these comments as Exhibit 2 and includes the recommendation to establish an Agricultural Advisory Committee in order to insure a positive dynamic among the stakeholders during development and construction of the line, if approved. Farm Bureau strongly urges consideration of the establishment of such a process to address general concerns of the agricultural community as explained in the attached testimony.

O20-11

³ The CPUC is required to consider such values independently of CEQA pursuant to Public Utilities Code Section 1002(a)(1).

2. Testing and Soil Sampling in Agricultural Areas (Pages 4.7-16)

There is an unsupported presumption in the discussion about construction activities' exposure of hazardous materials that pesticides, herbicides or fumigants would be found in land used for agricultural purposes. The proposed testing in the mitigation measure should be much more tailored to the specific circumstances regarding the land which is being impacted. Use of chemicals in the agricultural industry is highly regulated and subject to extensive testing and reporting. The website for the California Department of Pesticide Regulation provides a review of the testing and safety procedures inherent in the regulations. (www.cdpr.ca.gov)

O20-12

Mitigation measure 4.7 – 3b should be modified to take advantage of the extensive reporting requirements applicable to agricultural operations to better assess any necessity for soil testing and to properly tailor the testing. Agricultural users are required to submit use reports with the County Agricultural Commissioner, which information is accessible under appropriate circumstances. It is more appropriate to tailor any testing to the circumstances required by the particular information obtained.

The measure should be revised to require that for areas where the land has been or is currently being farmed, information shall be requested from the County Agricultural Commissioner to determine if any herbicides, pesticides or fumigants have been used within a time period that would warrant testing soil. If testing is warranted, the sampling and testing plan shall be prepared and conducted by an appropriate California licensed professional and sent to a California Certified laboratory. The plan shall also be provided to the subject landowner. Samples shall be tested at a California Certified Laboratory. Results of the laboratory testing and recommended resolutions for handling and excavation of material shall be provided to the landowner in addition to the CPUC.

3. The DEIR Should Acknowledge Electric Field Effects on Apiaries

Power line electric fields have been shown to cause bees to leave their hives. Significant impacts to apiaries located near a new transmission line would occur.⁴ Much of the orchards and groves in the project area depend on bees for pollination and apiaries may be in the area during energization of the line. Edison should be required to survey the approved route and determine if apiaries will potentially be impacted. This is an impact on which the Agricultural Advisory Committee could provide input and facilitate coordination with timing of energization to reduce risk of loss. Honey bee populations are disappearing at an unprecedented rate and management of any preventable loss is important.

O20-13

⁴ Sunrise Powerlink Project Final EIR

4. The Impact of Access Roads in Agricultural Areas is Unclear (Pages 2-24, 3-11, 3-14)

The DEIR addresses access roads for the various routes, referencing the fact private ranching roads will be used to the extent feasible. The implication appears to be that the use of private ranching roads creates no new impacts. That is not the case and recognition of the increased use and new affect on adjoining properties should be analyzed.

O20-14

5. Conservation Easements Do Not Mitigate For Agricultural Resources Lost to the SCE Loop (Page 4.2-14)

The DEIR recommends that conservation easements on Farmland be required to compensate for agricultural resources lost to the SCE Loop. It states it would reduce the impact of the conversion. It does not. Farm Bureau supports conservation easements, but maintaining resources elsewhere does nothing to replace the loss to these resources. And as explained in the previous discussions, the lost acreage will likely be much greater than the DEIR estimates.

O20-15

6. Lines Should Be Placed Along Parcel Lines Where Appropriate

Location of transmission lines can significantly affect the long-term viability of agricultural resources. Siting lines along parcels or boundaries does not eliminate but can reduce long-term effects.

O20-16

7. The Mitigation Measures Need To Provide For Timely Resolution (Chapter 8)

The methodologies used for mitigation monitoring, reporting and compliance require additional refinements to assure that the measures identified for implementation will be carried out in order to actually reduce impacts to less than significant levels. The measures cannot be considered feasible if the utility retains too much discretion.

O20-17

As a first step the CPUC should ensure all landowners, impacted by the SCE Loop receive a copy of the procedures and the compliance requirements in an easy to read format.

Many of the mitigation measures (i.e. 4.2-5, 4.2-1b) require SCE to submit plans and documentation to the CPUC. The same information should be required to be delivered to the landowners.

Finally, the Dispute Resolution Process set forth (page 8-6) should provide for an expedited resolution option. Because many of the impacts can affect growing crops, which may be vulnerable when there are delays in resolution, time can be of the essence. A 10 day time delay as could occur under step 3

may translate into significant lost income. A separate process and CPUC designee should be established for time sensitive issues.

O20-17
cont.

A Comparison of Alternatives Makes Clear That PACE's Route 3A Provides The Best Option (Pages 5-2, 5-3)

The DEIR provides the acreage comparison for the various Routes, demonstrating Route 3 creates the least impact to agricultural resources. Route 3A, which PACE proposed to respond to the biological impacts, retains that comparative impact. What distinguishes Route 3/3A from the other alternatives is the reliance on the existing right-of-way of the current 220kV transmission lines. Use of the existing right-of-way provides a number of benefits:

1. It reduces impacts to acreage in the County from the lines. The routes that make less use of the existing right-of-way would traverse Farmland with the capability of producing high value specialty crops. Those impacts would be in addition to the acreage currently impacted by the existing right-of-way.

2. Use of existing right-of-way would reduce exposure to EMF. The older, shorter lattice towers on the existing rector line emit substantial EMF and more than would new structures. (DEIR 2-42)

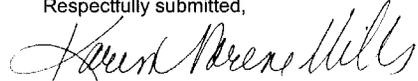
3. Use of the existing right-of-way complies with the Garamendi Principles as reflected in Senate Bill 2431 (SB 2431, Stats. 1988, Ch. 1457), including the encouragement of using existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable. There is no reason not to exhaust all efforts to utilize the existing right-of-way. Not only would it not use more than exists, but actually the needed right-of-way would be reduced from 150 feet to 100 feet.

O20-18

The CPUC and SCE should acknowledge the tremendous opportunity the community in Tulare County affected by the proposed SCE Loop has provided to them. Farm Bureau participates in many planning and policy development proceedings related to transmission planning. The complaints are rampant that utilities cannot build transmission projects. This project is one that in which no one has contested the need and is only requesting consideration to hear the community – its concerns and values – so that placement of the line can accommodate those interests. And the community – through the efforts of PACE – have provided a very viable option. Acknowledgement of the community concerns on this project will pay important dividends in future proceedings.

The California Farm Bureau Federation and the Tulare County Farm Bureau appreciate your consideration of its concerns and recommendations.

Respectfully submitted,



KAREN NORENE MILLS

Attorney for
California Farm Bureau Federation
and Tulare County Farm Bureau
2300 River Plaza Drive
Sacramento, California 95833
Telephone: (916) 561-5655
Facsimile: (916) 561-5691
E-mail: kmills@cbf.com

EXHIBIT 1

IMPORTANT FARMLAND MAPPING CATEGORIES AND SOIL TAXONOMY TERMS

The following definitions are used in preparing the Important Farmland Maps and the Farmland Conversion Report. Soil-specific terms, such as xeric, ustic, aridic, etc., are defined at the end of this document.

The definitions for Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Urban Built-up Land were developed by the USDA-SCS as part of their nationwide Land Inventory and Monitoring (LIM) system.

These LIM definitions have been modified for use in California. The most significant modification is that Prime Farmland and Farmland of Statewide Importance must be irrigated. Farmland of Local Importance has been identified by local advisory committees and vary from county to county, as intended by the LIM. Mapping of Grazing Land as part of an Important Farmland Map is unique to California. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres will be incorporated into the surrounding map classifications.

Prime Farmland

Prime Farmland is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Prime Farmland must meet all the following criteria:

- a. **Water**
The soils have xeric, ustic, or aridic (torric) moisture regimes in which the available water capacity is at least 4.0 inches (10 cm) per 40 to 60 inches (1.02 to 1.52 meters) of soil, and a developed irrigation water supply that is dependable and of adequate quality. A dependable water supply is one which is available for the production of the commonly grown crops in 8 out of 10 years; and
- b. **Soil Temperature Range**
The soils have a temperature regime that is frigid, mesic, thermic, or hyperthermic (pergelic and cryic regimes are excluded). These are soils that, at a depth of 20 inches (50.8 cm), have a mean annual temperature higher than 32°F (0° C). In addition, the mean summer temperature at this depth in soils with an O horizon is higher than 47° F (8° C); in soils that have no O horizon, the mean summer temperature is higher than 59° F (15° C); and
- c. **Acid-Alkali Balance**
The soils have a pH between 4.5 and 8.4 in all horizons within a depth of 40 inches (1.02 meters); and
- d. **Water Table**

The soils have no water table or have a water table that is maintained at a sufficient depth during the cropping season to allow cultivated crops common to the area to be grown; and

- e. **Soil Sodium Content**
The soils can be managed so that, in all horizons within a depth of 40 inches (1.02 meters), during part of each year the conductivity of the saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage is less than 15; and
- f. **Flooding**
Flooding of the soil (uncontrolled runoff from natural precipitation) during the growing season occurs infrequently, taking place less often than once every two years; and
- g. **Erodibility**
The product of K (erodibility factor) multiplied by the percent of slope is less than 2.0; and
- h. **Permeability**
The soils have a permeability rate of at least 0.06 inch (0.15 cm) per hour in the upper 20 inches (50.8 cm) and the mean annual soil temperature at a depth of 20 inches (50.8 cm) is less than 59° F (15° C); the permeability rate is not a limiting factor if the mean annual soil temperature is 59° F (15° C) or higher; and
- i. **Rock Fragment Content**
Less than 10 percent of the upper 6 inches (15.24 cm) in these soils consists of rock fragments coarser than 3 inches (7.62 cm); and
- j. **Rooting depth**
The soils have a minimum rooting depth of 40 inches (1.02 meters).

Farmland of Statewide Importance

Farmland of Statewide Importance is land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Farmland of Statewide Importance must meet all the following criteria:

- a. **Water**
The soils have xeric, ustic, or aridic (torric) moisture regimes in which the available water capacity is at least 3.5 inches (8.89 cm) within a depth of 60 inches (1.52 meters) of soil; or within the root zone if it is less than 60 inches (1.52 meters) deep. They have a developed irrigation supply that is dependable and of adequate quality. A dependable water supply is one which is available for the production of the commonly grown crops in 8 out of 10 years; and

b. Soil Temperature Range

The soils have a temperature regime that is frigid, mesic, thermic, or hyperthermic (pergelic and cryic regimes are excluded). These are soils that, at a depth of 20 inches (50.8 cm), have a mean annual temperature higher than 32° F (0° C). In addition, the mean summer temperature at this depth in soils with an O horizon is higher than 47° F (8° C); in soils that have no O horizon, the mean summer temperature is higher than 59° F (15° C); and

c. Acid-Alkali Balance

The soils have a pH between 4.5 and 9.0 in all horizons within a depth of 40 inches (1.02 meters) or in the root zone if the root zone is less than 40 inches (1.02 meters) deep; and

d. Water Table

The soils have no water table or have a water table that is maintained at a sufficient depth during the cropping season to allow cultivated crops common to the area to be grown; and

e. Soil Sodium Content

The soils can be managed so that, in all horizons within a depth of 40 inches (1.02 meters), or in the root zone if the root zone is less than 40 inches (1.02 meters) deep, during part of each year the conductivity of the saturation extract is less than 16 mmhos/cm and the exchangeable sodium percentage is less than 25; and

f. Flooding

Flooding of the soil (uncontrolled runoff from natural precipitation) during the growing season occurs infrequently, taking place less often than once every two years; and

g. Erodibility

The product of K (erodibility factor) multiplied by the percent of slope is less than 3.0; and

h. Rock Fragment Content

Less than 10 percent of the upper 6 inches (15.24 cm) in these soils consists of rock fragments coarser than 3 inches (7.62 cm).

Farmland of Statewide Importance does not have any restrictions regarding permeability or rooting depth.

Unique Farmland

Unique Farmland is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, that has been used for the production of specific high economic value crops at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Characteristically Unique Farmland:

- a. Is used for specific high value crops; and
- b. Has a moisture supply that is adequate for the specific crop; the supply is from stored moisture, precipitation or a developed irrigation system; and
- c. Combines favorable factors of soil quality, growing season, temperature, humidity, air drainage, elevation, exposure, or other conditions, such as nearness to market, that favor growth of a specific food or fiber crop; and
- d. Excludes abandoned orchards or vineyards, dryland grains, and extremely low yielding crops, such as irrigated pasture, as determined in consultation with the County Cooperative Extension Director and Agricultural Commissioner.

High-value crops are listed in California Agriculture, an annual report of the California Department of Food and Agriculture. In order for land to be classified Unique Farmland, the crop grown on the land must have qualified for the list at some time during the two update cycles prior to the mapping date.

Farmland of Local Importance

Farmland of Local Importance is either currently producing crops, has the capability of production, or is used for the production of confined livestock. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland. This land may be important to the local economy due to its productivity or value. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use. In a few counties the local advisory committee has elected to additionally define areas of Local Potential (LP) farmland. This land includes soils which qualify for Prime Farmland or Farmland of Statewide Importance, but generally are not cultivated or irrigated. For reporting purposes, Local Potential and Farmland of Local Importance are combined in the acreage tables, but are shown separately on the Important Farmland Map.

Farmland of Local Importance is initially identified by a local advisory committee (LAC) convened in each county by FMMP in cooperation with the USDA-SCS and the county board of supervisors. LAC membership is very similar to the map reviewers list on page 6 of this document. Authority to recommend changes to the category of Farmland of Local Importance rests with the board of supervisors in each county. The FMMP presents each draft map to the board of supervisors for their review. After the presentation of this map, the board of supervisors has a 90-day review period in which to request any needed modifications. An extension may be granted upon request. The board of supervisors may then approve or disapprove the Farmland of Local Importance category. The FMMP will accept the recommendation of the board of supervisors if it is consistent with the general program guidelines.

If no action is initiated by the county to identify or adopt a Farmland of Local Importance definition within a year of contact by FMMP, the county will be deemed to have no adopted definition for Farmland of Local Importance.

Any revision to the initial board of supervisors' action on Farmland of Local Importance will require 30-day written notice to FMMP and members of the LAC. This process may require reconvening of the LAC.

County definitions of Farmland of Local Importance are contained in Appendix C.

Grazing Land

Grazing Land is defined in Government Code §65570(b)(3) as:

"...land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock."

The minimum mapping unit for Grazing Land is 40 acres.

Grazing Land does not include land previously designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, and heavily brushed, timbered, excessively steep, or rocky lands which restrict the access and movement of livestock.

The FMMP convenes a grazing land advisory committee in each project county to help identify grazing lands. The committees consist of members of the local livestock ranching community, livestock ranching organizations, and the U. C. Cooperative Extension livestock advisor. The FMMP works with the president of the local Cattlemen's Association and the U.C. Cooperative Extension livestock advisor in selecting members of these committees.

Urban and Built-up Land

Urban and Built-up Land is used for residential, industrial, commercial, construction, institutional, public administrative purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as a part of Urban and Built-up Land if they are a part of the surrounding urban areas.

Units of land smaller than 10 acres will be incorporated into the surrounding map classifications. The building density for residential use must be at least 1 structure per 1.5 acres (or approximately 6 structures per 10 acres). Urban and Built-up Land must contain man-made structures or buildings under construction, and the infrastructure required for development (e.g., paved roads, sewers, water, electricity, drainage, or flood control facilities) that are specifically designed to serve that land. Parking lots, storage and distribution facilities, and industrial uses such as large packing operations for agricultural produce will generally be mapped as Urban and Built-up Land even though they may be associated with agriculture.

Urban and Built-up Land does not include strip mines, borrow pits, gravel pits, farmsteads, ranch headquarters, commercial feedlots, greenhouses, poultry facilities, or road systems for freeway interchanges outside of areas classified as Urban and Built-up Land areas.

Within areas classified as Urban and Built-up Land, vacant and nonagricultural land which is surrounded on all sides by urban development and is less than 40 acres in size will be mapped as Urban and Built-up. Vacant and nonagricultural land larger than 40 acres in size will be mapped as Other Land.

Other Land

Other Land is that which is not included in any of the other mapping categories. The following types of land are generally included:

- a. rural development which has a building density of less than 1 structure per 1.5 acres, but with at least 1 structure per 10 acres;
- b. brush, timber, wetlands, and other lands not suitable for livestock grazing;
- c. government lands not available for agricultural use;
- d. road systems for freeway interchanges outside of Urban and Built-up Land areas;
- e. vacant and nonagricultural land larger than 40 acres in size and surrounded on all sides by urban development;
- f. confined livestock, poultry, or aquaculture facilities, unless accounted for by the county's Farmland of Local Importance definition;
- g. strip mines, borrow pits, gravel pits, and ranch headquarters, or water bodies smaller than 40 acres;
- h. a variety of other rural land uses.

Land Committed to Nonagricultural Use

Land Committed to Nonagricultural Use is land that is permanently committed by local elected officials to nonagricultural development by virtue of decisions which cannot be reversed simply by a majority vote of a city council or county board of supervisors.

County boards of supervisors and city councils will have the final authority to designate lands in this category. The FMMP will work with city and county planning staffs to obtain this information. Land Committed to Nonagricultural Use will be shown on an overlay to Important and Interim Farmland Maps. The current land use will be indicated on the base map, with the overlay indicating the areas that are Committed to Nonagricultural Use.

Land Committed to Nonagricultural Use must be designated in an adopted, local general plan for future nonagricultural development. The resulting development must meet the requirements of Urban and Built-up Land or the rural development density criteria of Other Land.

Land Committed to Nonagricultural Use must also meet the requirements of either (a) or (b) below:

- a. It must have received one of the following final discretionary approvals:
 1. Tentative subdivision map (approved per the Subdivision Map Act);
 2. Tentative or final parcel map (approved per the Subdivision Map Act);
 3. Recorded development agreement (per Government Code §65864);

4. Other decisions by a local government which are analogous to items #1-3 above and which exhibit an element of permanence. Zoning by itself does not qualify as a permanent commitment.

Or

- b. It must be the subject of one of the final fiscal commitments to finance the capital improvements specifically required for future development of the land in question as shown below:
 1. Recorded Resolution of Intent to form a district and levy an assessment;
 2. Payment of assessment;
 3. Sale of bonds;
 4. Binding contract, secured by bonds, guaranteeing installation of infrastructure;
 5. Other fiscal commitments which are analogous to items #1-4 above and exhibit an element of permanence.

Land Committed to Nonagricultural Use is mapped when the respective local government notifies FMMP that the land meets these criteria and submits 1:24,000 maps identifying the area and showing its boundaries. The information provided is subject to verification by FMMP. In some cases, the local government must also provide FMMP with documentation of the permanent commitment.

Soil Taxonomy Terms

Soils are classified based on their physical and chemical characteristics using systems outlined by the U.S. Department of Agriculture's *Soil Survey Manual* and the National Cooperative Soil Survey's *Soil Taxonomy*.

Soil **horizons** are layers of soils approximately parallel to the land surface and differing from adjacent, genetically related layers in physical, chemical, and biological properties. Examples of such properties include color, texture, acid-alkali balance, and organic matter content.

Soil moisture regimes are used in defining soil classes at various levels in the soil taxonomy system:

Xeric - typically found in Mediterranean-type climates where winters are moist and cool, and summers are warm and dry.

Ustic - involves the concept of limited, but effective, soil moisture. Though implying dryness, moisture is available at a time when other conditions are suitable for plant growth.

Aridic (torric) - soils with this moisture regime are generally found in arid climates with hot and dry summers.

Soil temperature regimes are used in defining soil classes at a depth of 19.7 inches (50 cm or to the depth of rock if it is shallower) which is analogous to plant rooting depth.

Frigid - mean annual soil temperature is less than 47° F (8° C) and the difference between mean winter and mean summer temperature is more than 9° F (5° C).

Mesic - mean annual soil temperature is between 47° F (8° C) and 59° F (15° C) and the difference between mean summer and mean winter soil temperature is more than 9° F (5° C).

Thermic - mean annual soil temperature is between 59° F (15° C) and 72° F (22° C), and the difference between mean summer and mean winter soil temperature is more than 9° F (5° C).

Hyperthermic - mean annual soil temperature is greater than 72° F (22° C) and the difference between mean winter and mean summer temperature is more than 9° F (5° C).

Pergelic - mean annual soil temperature is lower than 32° F (0° C). Permafrost is present.

Cryic - mean annual temperature is higher than 32° F (0° C) but lower than 47° F (8° C) and the difference between mean summer and mean winter soil temperature is more than 9° F (5° C).

Soil salinity may be expressed in terms of the electrical conductivity of the water in contact with the soil.

mmhos/cm - a unit of electrical conductivity, which is a measure of the salinity of soil.

Soil acid-alkali balance is expressed in terms of pH.

pH - a numerical measure of acidity or hydrogen ion activity. Neutral is pH 7.0. All pH values below 7.0 are acid, and all above 7.0 are alkaline.

1 Application No.: A.08-05-039

2 Exhibit No.: _____

3 Witness: Rex Laird

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Testimony of

Rex Laird

on behalf of

California Farm Bureau Federation

and the Tulare County Farm Bureau

for the Application of

Southern California Edison Company of

The San Joaquin Cross Valley Loop

Transmission Project

KAREN NORENE MILLS

Attorney for

California Farm Bureau Federation

Tulare County Farm Bureau

2300 River Plaza Drive

Sacramento, CA 95833

Telephone: (916) 561-5655

Facsimile: (916) 561-5659

E-mail: kmills@cfbf.com

July 20, 2009

EXHIBIT 2

1 **INTRODUCTION**

2
3 My name is Rex Laird¹, and I am a consultant representing the interests of the
4 Tulare County Farm Bureau and the California Farm Bureau Federation in this
5 proceeding², collectively, "Farm Bureau". Farm Bureau is submitting testimony in this
6 proceeding because Southern California Edison's San Joaquin Cross Valley Loop
7 220kV Transmission Line Project ("SCE Loop") potentially affects important agricultural
8 lands in Tulare County, which in turn affects the community as a whole. In farming
9 communities the sustainability of the community depends upon the continued long-term
10 viability of its agricultural operations and related industries, as they provide the
11 economic base for the community.

12
13 Specifically, I am offering testimony in two areas:

14
15 1. In the context of community values, Farm Bureau recommends for the
16 Commission's consideration the creation of an Agricultural Advisory Committee to
17 provide opportunities for community input into details for implementation of the
18 mitigation measures that will be required for the SCE Loop as necessitated by the Final
19 environmental Impact Report.

20
21 2. Support of Route 3A, the route PACE describes as a modification to
22 Route 3. I address the route and how its unavoidable impacts are fewer than in the
23 other alternatives in the context of the impacts to agricultural resources and by
24 extension to the Tulare County community. (Scoping Memo and Ruling, Issues 5 and
25 6.) Because all of the proposed routes for the SCE Loop create unmitigable
26 environmental impacts, the California Public Utilities Commission should consider the

27
28 ¹ Mr. Laird's qualifications are provided at the end of this testimony
² Tulare County Farm Bureau is a member-controlled, grassroots policy driven organization. Founded in
1916, it currently has over 2,700 members from Tulare County. It is governed by a 23 member Board of
Directors and provides a voice for promoting the common interests of farmers and ranchers in Tulare
County. The California Farm Bureau Federation is a voluntary, non-profit corporation representing
approximately 85,000 members in 53 county Farm Bureaus (including Tulare County Farm Bureau) from
56 counties in the State. The California Farm Bureau Federation is jointly sponsoring the testimony on
this matter of particular interest to members in Tulare County.

1 benefits of Route 3A in the form of the lesser harm the route causes, as the
2 Commission weighs the many factors necessary in any decision that would authorize
3 the SCE Loop.

4
5 Establishment of Agricultural Advisory Committee

6
7 The SCE Loop will have significant impacts on the agricultural industry and
8 related economics of Tulare County during its construction, operation and maintenance,
9 irrespective of which route is chosen. If this project is to co-exist with any degree of
10 compatibility with the community, extreme care must be taken with the existing
11 agricultural operations and the surrounding community during construction, future
12 operation and maintenance of the project. Some impacts can be limited or mitigated;
13 others will not be able to be mitigated in any feasible manner.

14
15 The commodity make-up of Tulare County agriculture in the affected portion of
16 the county is very stable having been in existence for more than a century. Orchard
17 crops that dominate the community of the proposed project provide one of the most
18 stable economies in California agriculture and also require extensive support industries
19 for its historic and future sustainability, as compared to other commodities within the
20 County and balance of the state. That dependency is evident in the goals and policies
21 of Tulare County's General Plan. To view the loss of agricultural land for this project
22 simply in the context of the total number of acres of agricultural land within the County
23 as Edison did, would be a tragic mis-calculation and an injustice to the sustainability and
24 economic vitality of the County. This type of project and specific agricultural operations,
25 historically have co-existed in a compatible fashion in this County and in the balance of
26 Edison's service area. This co-existence is not a matter of chance, but the result of
27 diligent efforts on the part of all parties involved.

O20-19

1 In order to insure that an optimum and mutually beneficial dynamic is developed
 2 and maintained between Edison, the Commission and Tulare County agricultural
 3 interests, we propose the creation of an Agricultural Advisory Committee ("Committee")
 4 for this project. This committee could be developed from existing agricultural
 5 organizations and community based groups that have emerged as a result of the
 6 proposed project. Others that have specific expertise in such areas as pest control,
 7 water well development and irrigation systems, University of California Cooperative
 8 Extension, additional research organizations and a limited number of individual growers
 9 could also be included in the composition of the Committee as may be agreed to. The
 10 total number of participants should not exceed twenty-one in order to ensure a workable
 11 construct. A professional facilitator would need to be retained to insure the
 12 effectiveness and value of the Committee's efforts and ultimate work product. The
 13 facilitator would report the work product of the Committee to Edison, the CPUC
 14 mitigation monitor and the CPUC project manager.

15
 16 It should not be an expectation that all project related conflicts would be resolved,
 17 nor would the findings and recommendations be binding on any party. However, it
 18 should be an expectation that the Committee's efforts would result in many conflicts
 19 being avoided or resolved and unmitigable project impacts reduced. It should be a
 20 stated goal of the Committee to attempt to develop a project process that significantly
 21 enhances the probability of a project that would co-exist with agriculture in a sustainable
 22 fashion for the life of the project. There are a number of issue areas that could be
 23 raised before the Committee. The concept would be to address the issues and develop
 24 ground rules or protocols for treatment of certain situations. It is recognized that the
 25 necessity of agreement between the landowner and Edison will still be required,
 26 although by discussing solutions early in a community based construct, the potential for
 27 agreement is heightened.
 28

O20-19
cont.

1 To provide context to the Committee and the value it can bring, a brief list of issues
 2 are explored below, which issues were discussed in the Draft Environmental Impact
 3 Report ("DEIR"). These examples are ones where there is a significant amount of room
 4 for discussion about how to actually achieve agreed to results.

5
 6 1. Soil disruption and compaction during construction: Mitigation measure 4.2-1a in
 7 the DEIR recognizes that the soils in agricultural areas will be moved, compacted
 8 or affected in a variety of ways. The mitigation measure makes broad
 9 suggestions about how to minimize the impacts, but there are not sufficient
 10 details. Best management practices would need to be developed by the
 11 Committee prior to construction to insure the soil is managed in the right of way
 12 and the surrounding temporary work areas would be returned to pre-project
 13 conditions at completion of the project. As noted in the measure, the CPUC
 14 mitigation monitor would be engaged and could bring forward the Committee's
 15 recommendation.

16
 17 2. Develop a construction schedule that would result in minimum conflicts and
 18 interruptions of standard cultural practices such as harvesting for the various
 19 crops. This is generally addressed by mitigation measure 4.2-1b. Each crop will
 20 have a different protocol that requires appropriate treatment. The mitigation
 21 measure requires SCE to submit documentation of the construction schedule in
 22 comparison to the growing season to the Commission for review. It would benefit
 23 all stakeholders, affected landowners, the Commission and Edison, if there were
 24 a mechanism in place that could inform the process about the local cultural
 25 practices before Edison presents its plans to landowners.

26
 27 3. Interruption of irrigation schedules: Irrigation schedules are critical during certain
 28 times of the year and also for frost protection in winter months. With the activities
 of the Committee, irrigation systems sharing might be considered to minimize
 negative impacts. Also avoidance of water well relocations where a single well

O20-19
cont.

1 serves multiple properties and where no alternative source exists could be
 2 addressed.

3

4 4. Dust Control: Dust control is an issue not only as an air quality concern but as a
 5 pest control issue in orchards and other crops. Uncontrolled dust results in
 6 increased use of pesticides, because dust acts as a carrier for pests and
 7 diseases. In organic operations extensive use of approved materials is needed
 8 and water is used to wash the leaves of the crops. Dust is not only a concern
 9 during construction, but also as a result of vehicle access in the right of way for
 10 maintenance. If a high-pressure wash is used to clean insulators in the course of
 11 normal maintenance, the wash water will need to be controlled to avoid the
 12 adjacent trees outside of the right of way. The impact of dust is recognized in
 13 measure 4.2-1b, but only in a very general way. The Committee would be able
 14 to facilitate an understanding of construction needs and how construction
 15 specifically affects crops at various times of the season.

16

17 5. Minimize alignment conflicts that limit cultural practices: Some of the crops, in
 18 the area of the SCE Loop, currently use aerial applicators for pest control and
 19 frost protection. Alignment modifications could result in minimizing these
 20 conflicts. A review of common access points for multiple property owners could
 21 be addressed before final alignment routes are adopted.

22

23 The activity of the Agricultural Advisory Committee would result in a more holistic
 24 approach to the issue of the needs of the property owners and their agricultural
 25 operations. As stated before, the recommendations of the Committee would not be
 26 binding on any of the property owners, as their negotiations occur during the right of
 27 way acquisition process. However, the Committee process as proposed could result in
 28 a more uniform treatment of all property owners, rather than relying on the negotiation

O20-19
cont.

1 ability of each owner and their legal counsel.

2

3 The foregoing in no way is to be construed as a comprehensive review or even the
 4 majority of the issues that will arise in connection with the project. However, it is hoped
 5 that it will give a context as to how this proposed process might work and the type of
 6 issues that could be addressed and resolved by the Committee. It is not a novel
 7 concept but not common in this type of application. It is not intended to be a total
 8 conflict resolution process, as elimination of conflict is probably an impossibility. Use of
 9 the Committee can result in the goals already outlined and is a natural extension of the
 10 existing process of the Environmental Impact Report and the federal and state
 11 protections that are afforded the land owner for just compensation for the property
 12 acquired and compensation for damages resulting from the project.

13

14 I have had two personal experiences with this type of process that fall on either side
 15 of what is being proposed. The first experience was as a founding member of the Ag
 16 Futures Alliance of Ventura County. This group was the most unlikely collection of
 17 people, who only shared one common interest, the sustainability of Ventura County
 18 Agriculture. It brought together a group of people who had been in contentious litigation
 19 against each other in the recent past and had a long, long history of being at odds. It
 20 took the entire first year to develop the rules of engagement and how we would talk to
 21 each other and behave while in the same room. This foundation of a constitution
 22 evolved into a more complete document that still guides the group today. Since the
 23 formation of the Alliance, it has supported statewide legislation on the use of pesticides
 24 near schools, caused the modification of land use regulation to promote farm worker
 25 housing, held numerous seminars and raised monies for farm worker housing projects.

26

27 In a less complex setting the second example occurred when environmental
 28 organizations prevailed in a law suit against Region 9 of the Environmental Protection

O20-19
cont.

1 Agency for enforcement of the Federal Clean Water Act provisions, as the provisions
2 applied in a portion of Ventura County. Waste Water Treatment plants, Cities, the local
3 Flood Control District, Special Water Districts, the County, and the agricultural
4 communities all found themselves under a common set of mandates from Federal and
5 State Water Quality standards. To the credit of all, they came together to achieve
6 historic progress in compliance with the terms and conditions of the lawsuit. It is still a
7 work in progress today, but the value of a co-operative effort towards a shared goal is
8 being achieved with historic success even though the participants didn't set the goals.

9
10 What is being proposed for this project falls somewhere between these two
11 examples I have given and I know from my more than ten years of experience with this
12 process, the proposed Committee can work. The agricultural community and Farm
13 Bureau in particular, typically look for mechanisms to create solutions rather than road
14 blocks.

15
16 **IN SUPPORT OF ROUTE 3A**

17
18 Farm Bureau supports Route 3A advanced by PACE because it will have the
19 least impact on those agricultural resources, which drive the economic and cultural
20 framework that sustains Tulare County. Tulare County is the second-leading producer
21 of agricultural commodities in the United States. In 2008 the total gross production
22 value was over \$5 billion. Agriculture is the largest private employer in the county with
23 farm employment accounting for nearly a quarter of all jobs. Processing,
24 manufacturing, and service to the agriculture industry provide many other related jobs.
25 Six of the top fifteen employers in the county are food handling or processing
26 companies, which includes fruit packing houses and dairy processing plants. 1 in every
27 5 jobs in the San Joaquin Valley is directly related to agriculture. Tulare County
28 agribusiness is dynamic and reflects the changing demands of consumers and export

O20-19
cont.

O20-20

1 markets.

2
3 Route 3A appears to fulfill the stated electrical system goals and yet minimizes
4 the impacts on agricultural resources and biological resources, which are the impacts
5 that cannot be mitigated under the DEIR analysis. I am using the discussion of
6 agricultural resources in the DEIR as a tool to compare the routes and help in
7 understanding the importance of minimizing impacts to agriculture in Tulare County. As
8 explained earlier in this testimony, the sustainability of agriculture in Tulare County is
9 important to the community as a whole. Route 3A provides the best option for ensuring
10 that sustainability. Because the Commission bears the ultimate responsibility for
11 choosing the route for the SCE Loop if it is approved, it is important to convey the scope
12 of the impact to agriculture, since those impacts affect the community and how the
13 Commission determines the impacts should be addressed. I understand that Farm
14 Bureau will be submitting comments that recommend changes and additions to the
15 DEIR to address the impacts and mitigation measures. As the impacts to agricultural
16 resources are considered to assess the various routes, the need to look at the impacts
17 beyond just the land affected becomes obvious, especially for irrigated agriculture. The
18 impacts discussed here are used to exemplify the effects of the line and the myriad
19 ways that agricultural is affected as a result.

20
21 1. Mitigation for Various Land-Based Impacts Can Further Affect Agricultural
22 Resources

23
24 In addressing potential impacts to biological resources, the DEIR would require
25 mitigation through acquisition of land that supports special-status plants or
26 compensates for foraging habitat losses.³ Since the vast majority of underdeveloped
27 land in Tulare County suitable for such purposes is agricultural land, there is a
28

³ See, for example, mitigation measures 4.4-1b and 4.4-3b

1 significant possibility that further impacts to agriculture would occur. That effect has not
2 been taken into account, but can add to the economic concerns to the resources as
3 greater acreage would be used for non-agricultural purposes.

4
5 2. Conservation Easements on Existing Agricultural Resources Do Not
6 Eliminate the Effect of Lost Agricultural Resources

7
8 Farm Bureau supports the assurance of continued maintenance of agricultural
9 resources through the use of conservation easements, yet it is important to be realistic
10 about what the community gains as a result. The DEIR would require that for each acre
11 of prime, unique or statewide importance farmland permanently converted, an acre be
12 placed in a conservation easement to reduce the impact of the conversion. The
13 easements will not reduce the impact because the same amount of acreage remains
14 lost; the easement just secures the use of existing land. The DEIR recognizes despite
15 the easement the impact will remain at a significant level and adds validation to the
16 importance of considering Route 3A. Because the amount of agricultural acreage
17 affected by 3A is much less than for other routes, so too are the related effects from
18 taking acreage out of production.

19
20 3. Irrigation and Water Impacts Can Potentially Prove Long-Term

21
22 In a number of sections the DEIR recognizes the connection and importance
23 between water availability and deliverability and the resulting viability of the crops grown
24 around and near the potential lines.⁴ In addressing the conflict between the line and a
25 well or irrigated system, it is assumed the replacement of the device is simply a matter
26 of moving the source from one spot to another. It can be a far more complex process,
27 requiring experts to assess the viability of water sources. Although the impacts to
28 resources along the existing corridor should not be minimized, this is one issue area

⁴ DEIR, page 4.2-16, 4.7-23 and 4.8

O20-20
cont.

1 where use of the existing easements demonstrates how effects on agricultural
2 resources are minimized. Because the lines have been located since between 1911 and
3 1929 so the irrigation infrastructure has been planned around them. Greater likelihood
4 for compatibility exists by using the current ROW. Route 3A uses existing ROW to a
5 much greater extent than the other analyzed alternatives, with the exception of Route 3.

6
7 4. The SCE Loop Creates Long-Term Crop Implications to Various Crops

8
9 Tulare County's soil, water availability and climate provide the right conditions for
10 a wide range of crops, including fruit and nut commodities, which commodities were
11 valued at \$1,835,198,000 in 2008.⁵ Transmission lines create greater impacts in
12 orchards than in other crops, because of the requirements for maintaining vegetation
13 clearances around the lines. The DEIR and the Edison PEA address maintenance of
14 orchards under and near the lines. Both indicate that trees will be allowed under the
15 lines if maintained at 15 feet height. Lost in the translation is that to be maintained at 15
16 feet height, trees would have to be pruned every day or pruned below 15 feet in order to
17 comply with such a requirement.

18
19 The DEIR recognizes the impacts to walnut trees from that kind of height
20 restriction, but the impacts are likely to apply to other orchard crops as well. The
21 various alternatives cross a variety of orchard crops and just the trimming requirements
22 will mean greater impacts. Although Edison states that trees maintained at 15 feet can
23 stay within the line, the form easement document provided by Edison makes no
24 reference to any height allowance.⁶ With the changes over the years to vegetation
25 management requirements, it cannot be assumed that the authorization for planting of
26 any particular tree crop will continue for a defined period.

⁵ Tulare County Annual crop and Livestock Report 2008

⁶ Form easement provided by Edison pursuant to CFBF Data Request No. 2

O20-20
cont.

1 5. The issues raised in the recommendation to create an Agricultural Advisory
 2 Committee also highlight the cascading impact the placement of a line through the kind
 3 of crops that dominate the part of Tulare County the SCE Loop will have.

4
 5 In order for the Commission to understand the implications of picking a route
 6 through agricultural lands in Tulare County, it is my opinion that because of the value
 7 agriculture has to the community more than just acreage totals need to be counted.
 8 Only by bringing out the operational effects of taking specific land out of production and
 9 what it means to have a high voltage transmission line in the middle of an operation is it
 10 possible to know what the acreage figures suggest. The kinds of complexities that arise
 11 from building and maintaining a line through Tulare County would benefit from the
 12 proposed Agricultural Advisory Committee to help stakeholders work through potential
 13 solutions to the day-to-day effects of the line.

14
 15 Farm Bureau will be addressing the specific parameters of the impacts of the line
 16 on orchards in its DEIR Comments. For purposes of this testimony, these multiplier
 17 impacts reinforce the economic and community consequences from the line on
 18 agricultural property. Not only does it affect current crops, but it will drive what can be
 19 planted in the future. The route selected should be one that minimizes the affects on
 20 agricultural resources.

21
 22 This concludes my testimony.
 23
 24
 25
 26
 27
 28

O20-20
 cont.

**QUALIFICATIONS OF
 REX LAIRD**

My name is Rex Laird and my address is 85 Dana Point Avenue, Ventura, California.

I graduated from Cal Poly San Luis Obispo with a B.S. in Agriculture with a major in Husbandry.

From 1972 to 1980 I was employed by the County of Ventura in the Real Property section of the Public Works Agency. For the period 1972 to 1976, I worked in the leasing section handling leases of County owned property, including preparation of appraisals to assure proper payments or receipts. From 1976-1980, I worked in the appraisal department, which was responsible for the larger and more complex appraisals for acquisition of public rights of way, where most of the property impacted was agricultural land. During my tenure at the County I obtained certificates in real estate from both Ventura College and UCLA Extension. I have taken classes offered by the American Institute of Real Estate Appraisers.

From 1981-2008 I served as the Chief Executive Officer for the Ventura County Farm Bureau. Ventura County Farm Bureau is an independent, non-partisan organization that provides representation of the agricultural community. The position encompassed a broad range of responsibilities including:

- Researching and developing information to prepare recommendations on issues and opportunities that may be of concern or interest to the agricultural industry of Ventura County. Over the course of my years at Ventura County Farm Bureau issues were brought forward by members relating to utility practices on agricultural property.
- Serving as the organization's representative to various sectors of the community, including government, the media, business and cultural institutions.
- Interfacing with various regulatory entities on behalf of members to create coalitions and consensus in order to identify and implement solutions to a wide range of technical issues related to management of agricultural operations.

I have testified before a number of agencies and commissions, including the US House of Representatives Committee on Natural Resources, the California State Water Resources Control Board, California Senate Committee on Agriculture, Los Angeles Regional Water Quality Control Board*, Ventura Local Agency Formation Commission*, Ventura County Board of Supervisors, and various local special districts and City Councils in Ventura County, typically on a wide range of

issues affecting agriculture with a major focus on land use, water development, water quality, agricultural chemical use and Agricultural/Urban interface.

I have also testified as an expert witness in United States Tax Court on the issue of valuation of agricultural property for establishment of Federal Estate Taxes* regarding that portion of the value of the property attributable to speculation and therefore in excess of the portion of the property valued as productive farm land.

*Indicates sworn testimony

July 31, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/O Environmental Science Associates
225 Bush St., Ste. 1700
San Francisco, CA 94104-4207

RE Docket Number A.08-05-039

Mr. Uchida,

I appreciate the opportunity to comment to the California Public Utility Commission (CPUC) regarding the San Joaquin Cross Valley Loop Transmission Project. I previously provided testimony concerning SCE's request. A full copy of that testimony is attached.

I am a long time builder/developer in the Visalia area with land that will be affected by either of the routes pending. Route 1 will affect property we own in Farmersville. Routes 2 & 3 will all affect our Visalia project River Run Ranch more severely. Having said that, we realize the power system must go somewhere and it's going to happen.

Personally, I favor Route 3.

Routes 2 & 3 impact my company and property more than Route 1. However, Route 1 would be devastating to the City of Farmersville which in the last few years has begun to emerge as more than a suburb of Visalia.

How can you make Routes 2 & 3 more acceptable? How can your body improve the circumstances that this project be approved, constructed and maintained during its operations over the next 50 years?

O21-1



BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity for the San Joaquin Cross Valley Loop Transmission Project.

Application No. 0805039
(Filed May 30, 2008)

PREPARED DIRECT TESTIMONY OF DONALD FULBRIGHT
ON BEHALF OF
THE CITY OF VISALIA

These points should be considered:

- 1) Utilizing existing power line easements is the most efficient, but they are old and simply outdated. The original easement dates that affect our property go back to the early 1900's and don't limit the use of the land as severely as Edison tries to enforce today. The easements need to be refreshed for such a serious expansion.
- 2) The area we own used to be in the country and agricultural. Today, it is transforming to homes and neighborhoods within the City of Visalia limits. We need a new approach to areas within the City of Visalia.

O21-1
cont.

The property is strictly controlled by both Edison and the City of Visalia. The land owner is burdened with maintenance of tumbleweeds and property taxes without a way to make the property pay for itself.

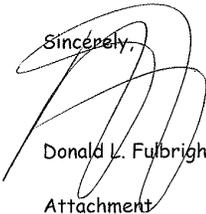
The solution is to allow the portion of chosen Route (2 or 3) that are within the City of Visalia limits be turned into a Publically Supported Landscape Trail System. This would serve to offset the economic, social and environmental effects of the proposed expansion. The upgrade of the system if you will should also serve to upgrade and reflect the current conditions of the surrounding property that is now the east side of Visalia consisting of people, neighborhoods and community.

O21-2

In our testimony we have provided excellent "Before" and "After" examples of the converting of tumbleweed easement areas to **community serving assets**.

We strongly encourage the commission to incorporate some sort of Edison/City of Visalia partnership to utilize this easement area (Walnut Ave. north to St. Johns River) into an easement Edison Trail System linking other City assets including the River Trail, Sports Park 1 and the new Sports Park 2 adjacent to the proposed easement.

Sincerely,



Donald L. Fulbright
Attachment

**PREPARED DIRECT TESTIMONY OF DONALD FULBRIGHT
ON BEHALF OF
THE CITY OF VISALIA**

Question 1: What is your name, background and experience?

Answer: Donald Fulbright. I have been a real estate developer/builder in the Visalia area since 1975. I have completed developments in five different cities, all in the proximity of Visalia. I have built more than 3,000 homes in my career.

Question 2: Do you own property that will be affected by the proposed Southern California Edison San Joaquin Cross Valley Loop Transmission project?

Answer: I have developments in Visalia and in Farmersville, both of which could be affected by the project depending on which route is selected. The most direct impact will be in Visalia, where my company, Donald Lawrence Company (holding title to the property as Castlewood Partners Inc.), owns the residential development (River Run Ranch) immediately west of the existing power lines, north of Houston Avenue. This development currently consists of 225 completed homes, all of which have been sold, and an additional 72 acres of partially completed residential neighborhoods, which on completion and build-out will have approximately 300 homes. The City of Visalia has approved a master site plan and tentative subdivision maps for approximately 158 homes in the undeveloped area of River Run Ranch on the west side of the Edison right of way. There are 54 lots on 17 acres that are currently under development in this phase (see attached Exhibit A) pursuant to an approved subdivision map. We have submitted building plans to the City for these homes and construction will begin soon. All of the streets and roads in this portion of the River Run Ranch development have been completed and the main trunk lines for sewer, water, and storm-water have been installed. There are conceptual plans for the remaining 55 acres of the River Run Ranch development west of the Edison right of way, as shown on Exhibit A.

Our company also owns the land underlying the Edison power line easement and the 64 acres of vacant land east of the power lines, which has not yet been annexed to the City. This area, which has been pre-zoned for commercial land uses, low density multi-family, and single

family housing, will eventually comprise the eastern portion of our River Run Ranch development.

The attached map (Exhibit A) also shows the conceptual layout for a multi-use corridor that includes a possible alignment of the future Visalia Parkway and a pedestrian trail underlying the power lines.

The Edison company currently has a right of way for power lines that cross through the River Run Ranch property in a north-to-south direction for 2,300 feet. Edison's easement, which was established in the early 1900's, is 150 feet in width and allows use of the land by the underlying land owner, with height restrictions applicable to any improvements.

If any of the Alternate Routes, as identified in the Draft Environmental Impact Report for the subject project, are selected, it is my understanding that the existing power lines in the right of way that crosses the River Run Ranch would be changed. Specifically, the current twin sets of 63-foot lattice towers, carrying three lines each, would be replaced with new twin sets of mono-pole towers that will be anywhere from 120 feet tall to 160 feet tall, each pole carrying six lines for a total of twelve lines, as compared to the current total of six lines.

Question 3: How will the intensified use of the power line easement affect your planned development?

Answer: We specifically designed the River Run Ranch development with special features to offset the impact of the existing power lines. Specifically, we made provisions in the design that ensured that only seven of the planned 525 homes west of the Edison right of way are closer than 140 feet from the nearest power line. As is shown on the attached Exhibit A, we were careful to ensure that a great majority of the streets, public open space and other similar amenities were included in this 140 foot buffer. We designed the development to include this buffer because we were concerned about the desirability of homes situated any closer than 140 feet from the power lines. In particular, home buyers will be concerned about the possible electro-magnetic field effects of living close to the lines as well as having to listen to the constant buzzing noise that the lines emit and the crackling sound that comes off of the lines after it has rained.

O21-3

1 If we had known that Edison was going to propose a transmission line project with pole
2 structures between 120 and 160 feet tall, we would have designed an even wider buffer area, in
3 the range of between 200 and 275 feet, instead of 140 feet.

4 If the height of the towers and the number of the lines on the towers are both doubled, it
5 is my opinion that the negative influence on potential buyers for homes in the immediate
6 vicinity is more than doubled.

7 **Question 4:** Doesn't raising the height of the pole structures actually provide a benefit
8 to your development?

9 **Answer:** As I understand it, even though the replacement poles will be taller under
10 the proposed project and the alternative routes, the lowest level of lines will still be
11 approximately 60 feet above ground level, about the same height as the current lines. Also, the
12 future lines will feature three vertical rows of lines, instead of just one. This means that there
13 will be an increased visual impact, with little or no offsetting benefit. Although I have heard
14 that the new pole set up will provide some level of improvement in electro-magnetic fields
15 exposure, in my experience, people do not bother to learn the latest science on electro-magnetic
16 field: if they can see the power lines, they will have a negative reaction, and there is no doubt
17 that more people will see the planned 160-foot towers than currently see the existing 60-foot
18 towers.

19 In my experience, any home that has an obvious view of major transmission lines is more
20 difficult to sell, and it will sell for approximately \$20,000 to \$30,000 less than other homes in
21 the same subdivision that do not have the same view of these lines. With the greater height, the
22 transmission lines will now be visible from further away; however, it is too late for us to
23 redesign our development to reduce the effect of the proposed project on the sales price of
24 homes in the development. It is my opinion that approximately 30 to 35 homes in our
25 subdivision will now experience a negative sales impact, with a corresponding total reduction in
26 value of approximately \$600,000 to \$1,000,000, as a result of raising the height of the pole
27 structures consistent with the project design. And that is only with regard to our currently
28

O21-3
cont.

1 approved, but not yet built, subdivision. I have not attempted to calculate the negative impact to
2 the value of the land to the east of the power lines that we are holding for future development .

3 Even if we were able to redesign the development to provide a larger set back from the
4 transmission line right of way, that would translate into a much smaller return on our
5 investment because we purchased the land anticipating the current setback, not a larger set back.
6 If we had known of the proposed Edison project at the time we initially purchased the property,
7 we would have factored this lost land into the purchase price. As a ballpark estimate, the value
8 of the land that we will not be able to develop as a result of the project as currently proposed,
9 (approximately 8 acres, based on an additional 150 feet from west to east and 2,300 feet from
10 north to south) is approximately \$650,000 in current values (based on a conservative estimate of
11 \$80,000 per acre).

12 **Question 5:** Are there features that could be incorporated into the project that you
13 believe would offset the economic and social effects of the project on your development that
14 you have described and that would provide important community benefits?

15 **Answer:** We obviously have taken steps in terms of designing the development on
16 our own land, including providing a buffer area, to address the effects of the existing
17 transmission lines. Ideally, in addition there are public uses and amenities that could be added
18 in this area to address the additional effects of the proposed project that I have described above.
19 We have attempted to show one concept for such public uses in the potential trail alignment that
20 can be seen on the attached Exhibit A. Amenities within the trail corridor underlying the
21 transmission lines would include publicly supported landscaping, including trees to help offset
22 the vertical visual effect of the poles, and walking and biking trails or horse paths.

23 Attached as Exhibit B are a series of photos of the desired type of conjunctive use that
24 would provide concrete benefits to the community and would offset the significant economic
25 effect that the new transmission lines will have on the River Run Ranch development. These are
26 photos of a Pacific Gas and Electric utility alignment in San Jose, California showing the before
27 and after utility line corridor. These photos, obtained from the National Trails Training
28 Partnership website, are available on line at

O21-3
cont.

O21-4

Lower Silver Creek Trail, North – Photo Gallery

[Return to Lower Silver Creek Trail, North](#)

[Return to Trails Home Page](#)

Dobern Bridge



From Bambi Lane - Before



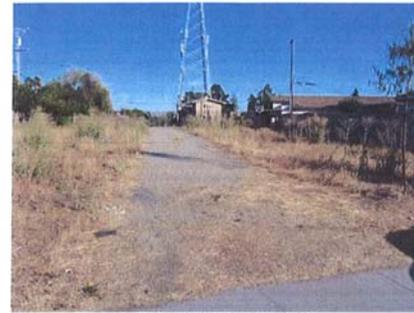
From Bambi Lane - *After!*



Toward Bambi Lane - Before



Toward Bambi Lane - *After!*



From Dobern Ave - Before



From Dobern Ave - *After!*

Wenlock Drive Pedestrian Corridor



Along Wenlock Drive - Before



Along Wenlock Drive - *After!*

Comment Letter O21



From Dumont Circle - Before

From Dumont Circle - After!



...more after

...more after



...more after

... and even more after

Comment Letter O21

Lausett Ave Bridge



Lausett Ave Bridge - Before

Lausett Ave Bridge - After!



From Lausett Ave - Before

From Lausett Ave - After!

Kammerer Avenue Bridge

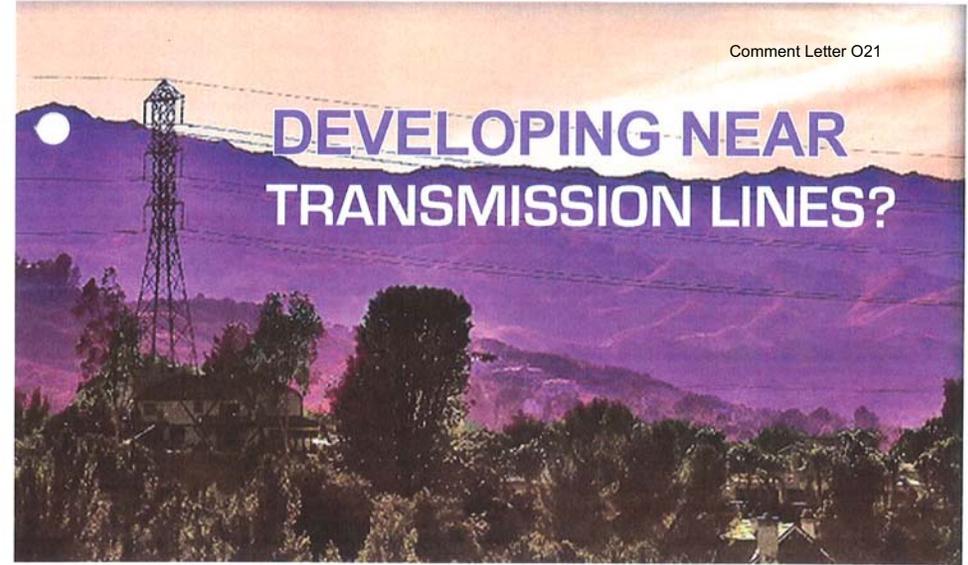


Trail through Capitol Park



[Return to Lower Silver Creek Trail, North](#)

[Return to Trails Home Page](#)



A little planning can go a long way in minimizing their impact.

BY GARY HOLISKO, MCIP

Lands under power lines and transmission towers, though primarily owned by private landowners, are subject to specific rights contained in the statutory right of way agreements referred to as rights of way. The agreements restrict owners' rights to activities that do not impact public safety, interfere with the operation of the lines, cause a hazard, or interfere with the rights granted. They also generally allow for the construction and maintenance of the existing facilities, including tree cutting and their replacement with future lines.

BC Transmission Corporation (BCTC) is a Canadian company established in 2003 as a provincial Crown corporation to focus on building and maintaining a safe, reliable and cost-effective power grid. BCTC recently published guidelines for development adjacent to its transmission corridors. The guidelines will assist landowners, designers, planners, developers and communities who are working within or beside power lines and transmission towers to minimize their impact and promote a quality environment.

BCTC was formerly the transmission group within BC Hydro, another provincial Crown corporation which continues to be responsible for generation and distribution services in much of BC. While BC Hydro retains ownership of the physical assets and the legal tenure for the rights of way, BCTC is responsible for operating, planning and maintaining the province's publicly owned high-voltage electric transmission grid. Transmission voltage power is delivered through

an interconnected system of more than 18,000 kilometers of transmission lines to substations which in turn step down the voltage for distribution. BCTC manages 20,500 steel towers, 75,000 wood poles, and 287 substations.

Designing Around Power Lines: Draft Guidelines

Landowners and developers often see proximity to power lines and rights of way as a factor that may affect property values. However, with effective planning and design, transmission corridors can provide benefits to landowners and create better, more aesthetically pleasing communities. A right of way on private property can create opportunities for individual property owners to enjoy larger lot sizes with the potential for large gardens and outdoor spaces, while the use of public right of way corridors for public amenities such as walking trails, playing fields and bicycle paths contributes to attractive communities which in turn serves to enhance neighborhood appeal and residential property values.

The Design Elements

It is important to create a harmony between density, alignment, orientation and landscaping, in order to create an aesthetically appealing community.

Topography

The location of towers can have an enormous impact on public perception. When towers are set in an elevated position and are viewed from lower ground, the scale and visual impact of the towers is emphasized. Conversely, where towers are viewed from an elevated position the visual impact is reduced. Towers set across the brow of a hill will be silhouetted against the sky and will appear more prominent than towers set in a similarly elevated position but with rising land or built development behind them.

Density

The density of property surrounding the tower can also affect its visual impact and perception in the community. By placing buildings with higher heights closest to the overhead power line, views of the line from public areas can be minimized. Higher densities close to power lines, particularly in residential areas with lower heights, can typically have a negative perception.

Alignment and Orientation

The alignment of streets and paths can reduce the number of direct views of towers, minimizing their impact and reducing the impression of a linear corridor.

Buildings should be oriented to minimize direct views of towers. Some developments may face towards the overhead power lines, rather than towers, as part of a variety of design responses to the transmission route. Development blocks adjacent to overhead power lines can also be left open ended, using the resultant space to create public gardens, squares or parking courts. The use of buildings oriented perpendicular to the lines, offers the opportunity to minimize direct views towards the route, significantly reducing the visual impact from streets, buildings and gardens. This orientation is best suited for high and medium density developments usually in the form of high rise condominiums, apartments and town homes.

The orientation of homes parallel to the right of way does little to minimize the visual impact of the lines from inside the homes. One solution is to locate cul-de-sacs on the edges of the right of way and between towers. Curving streets and paths, even by relatively small degrees, can significantly reduce the visual impact of towers. Views toward towers may occur at some distance from the tower, and can also be framed by new street scenes and public open spaces at some distance from the towers, particularly where there may be changes in topography.

The arrangement of buildings, boundaries, fences, paths and planting parallel to the transmission route over long distances will tend to highlight the presence of overhead power lines and the linear nature



Typical residential development backing onto two 230 kV H-frame lines in Delta, BC.

“Landscaping provides one of the most effective methods to diffuse the effects of power lines”

Outside of the right of way, strategic screening can enhance the quality and intimacy of the area, giving the impression that towers and lines are further away. Mature trees planted along streets can effectively screen views and enhance the residential environment. Layers of planting create a series of silhouettes into the distance, creating a depth in the field of vision that helps to reduce the visual impact of overhead power lines. In this way, views of towers can be effectively screened without the need for continuous belts of planting. When branches of mature trees actually arch over the street, then views of towers can be obscured for much of the year. Consideration should be given to the use of screening in layers with varying heights to match site circumstances.

Community Amenities within the Right of Way

Most public amenity uses are on municipal lands. While use of the right of way has some restrictions, the presence of long corridors of clear, open, space provides the opportunity to develop significant private and community amenities. Consent of the owner and the local government as well as BCTC will be required for any public use of a right of way.

In order to best use this space, it is worth considering design ideas, such as:

- Breaking the transmission route into cells using roads, bridges, etc.
- Creating places with a variety of uses such as garden squares and parking lots
- Creating meandering paths and varied planting
- Providing a mix of activities beneath and adjacent to overhead power lines

Compatibility

The following are examples of compatible uses within the right of way, subject to maintaining safety clearances.

Public Open Space and Playing Fields - active recreational uses may take place close to overhead lines subject to the nature of the activity, layout of playing fields and the level of supervision. The location and type of lighting used for playing fields within rights of way need to be reviewed by BCTC where high voltage overhead lines are present.

of the route and will make them more obtrusive. However, where one or more of these elements is varied (and not parallel), the linearity of the transmission route and its overall prominence can be diminished.

Distance

Varying the distance of development from transmission facilities is an important design tool. Buildings are not permitted within the right of way. Auxiliary buildings should be kept, as a minimum, at the edge of the right of way or set back to allow uses not otherwise permitted to take place within the right of way (e.g. in-ground swimming pools, greenhouses, garages, etc). In commercial and multi-residential settings, the area of the lot within the right of way can be used for parking and other amenities.

Landscaping and Screening

Landscaping provides one of the most effective methods to diffuse the effects of power lines and use the space within and adjacent to the right of way in a manner which is aesthetically pleasing and an amenity to homeowners. Screening can enhance the quality and intimacy of the immediate setting by creating the perception that towers have receded into the distance. The effectiveness of any screening depends on the distance of the viewer from the overhead power line and from the screening.

Within the right of way, trees and shrubs generally cannot exceed three meters in height at maturity. Appropriately low growing vegetation can be located within the right of way, while larger species can be planted near the edge, thereby reducing the visual impact of the lines and enhancing the overall environment.

Nature and Conservation - the retention or creation of nature conservation areas may be particularly suitable where public access to the area is restricted or prevented.

Circulation Paths - active recreation paths, roads, cycle paths and walkways can be successfully accommodated beneath high voltage overhead lines.

Allotments and Community Orchards - using rights of way for allotments and community orchards

Parking - accommodating ancillary parking beneath high voltage overhead lines.

Private Gardens - using rights of way for gardens and planting.

Power Line Safety and Maintenance

Contact, or near contact, with high voltage equipment is extremely dangerous and must be avoided. Objects that approach overhead electricity conductors too closely can cause fatal or severe shocks and burns. In order to prevent such incidents, minimum safety clearances for all overhead power lines are prescribed, which must be maintained between conductors and the ground, trees, buildings and any other structures, such as street lighting.

Care must be taken in unloading, stacking or moving material underneath conductors and in the construction of buildings or other structures in the vicinity of an overhead power line. Generally, buildings located outside of the right of way are safe from any of these concerns.

Emergency access to large buildings that are being constructed adjacent to transmission rights of way also must be considered. For example, the crew on a fire truck attempting to extinguish a fire in a multi-story development at the edge of a right of way must have adequate clearance from the transmission lines.

1. Induced Currents

Induction is the transfer of electric current or charge to an object that is not directly in contact with power lines. Induction can be an issue with buildings that are more than two stories, or long buildings that are parallel and located adjacent to high voltage (generally 230 kV and higher) lines and rights of way. As the height of a building increases, it comes into closer proximity to the high voltage wires with greater exposure to induced currents. While there is no direct public safety risk, it does significantly increase nuisance or micro-shocks. Developers should retain a professional consultant with expertise in calculating electric and magnetic fields, mitigation strategies and safety issues during construction and after occupancy if they plan to build in close proximity to high voltage transmission lines.



Playing fields and tennis courts underneath 230kV and 500 kV lines in Coquitlam, BC.



House development built on angle to 500 kV lines with trees screening right of way in Surrey, BC.

2. Electric and Magnetic Fields (EMF)

Power frequency (also referred to as extremely low frequency or ELF) electric and magnetic fields are present everywhere that electricity flows. All electric wires, and the lighting, appliances and other electrical devices they supply, are sources of electric and magnetic fields. Scientists have been researching EMF and possible health effects for more than 30 years, and this extensive research has yet to establish a link between health risks and EMF. Health Canada and the BC Centre for Disease Control state that there is no reason to be concerned about exposure levels in typical Canadian homes and workplaces, regardless of the proximity to power lines.

3. Changes to Ground Level

Changes to the ground level are not permitted without approval, as there must be a minimum distance between the lowest point of the transmission line and the ground. When ambient temperature is high and transmission lines are operating at maximum capacity, the lines will sag.

Conclusion

Transmission towers and lines are a necessary part of the infrastructure that enables us to provide electricity to our homes and businesses. Many transmission lines built in what were formerly rural areas are now being "encroached" upon by development. Hopefully this article, and the guide it is based upon, will provide some helpful guidelines on how to best consider transmission lines when developing lands within and nearby. By doing so, the owner, developer and community will all benefit. ☺

These guidelines were approved and placed on the BCTC website in April of this year. Visit them at: www.bctc.com/the_transmission_system/rights_of_way_prop_rights/

This is an updated version of the article that was published in Planning West magazine, September 2007 edition. Reprinted with permission, Planning Institute of British Columbia and BC Society of Landscape Architects.

Gregory S. Kirkpatrick
Farmland Conservation Strategies
1428 W. Howard
Visalia, CA 93277
559-635-0369 ofc./fax
gkirkpatrickfcs@sbcglobal.net

Comment Letter O22

Mr. Jensen Uchida
July 31, 2009
Page 2 of 4

Comment Letter O22

July 31, 2009

Mr. Jensen Uchida,
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Ste 1700
San Francisco, CA 94104-4207
E-mail: sjxvl@esassoc.com
Via: email

Re: Biological Resources Chapter 4.4, SCE San Joaquin Cross Valley Loop DEIR (CPUC A.08-05-039)

Dear Mr. Uchida;

From 1991 to 1996, I worked as a Project Scientist for Woodward-Clyde Consultants, serving as the lead field biologist evaluating the potential impacts of several major pipeline and freeway projects traversing California. In 1992 and 1993, I served as the principal investigator for a project to identify the remaining potential habitat and presence of eight target species in Tulare County: vernal pool fairy shrimp, California Tiger Salamander, San Joaquin Valley Orcutt grass, Hoover's spurge, California jewelflower, Green's tuctoria, San Joaquin woollythreads, and San Joaquin adobe sunburst. The results of this investigation were published in the report, *Focused Biological Surveys for Eight Target Species in Tulare County, California*, for the Tulare County Association of Governments in February, 1993. A supplemental report, *Focused Biological Surveys for Vernal Pool Fairy Shrimp (Branchinecta lynchi) in Tulare County, California*, was published in September, 1993.

Review of the Biological Resources Chapter 4.4 of the DEIR for the Cross Valley Loop indicates that potential impacts to sensitive species and habitats are similar along the Proposed Project and Alternative Routes, with the following exceptions: impacts to known habitat for several listed species at the Stone Corral Ecological Reserve (SCER) and potential impacts to Hoover's spurge and San Joaquin Valley Orcutt grass within designated critical habitat along Alternative Routes 2, 3 and 6. The DEIR appears to overstate the potential impacts to Hoover's spurge and San Joaquin Orcutt grass and fails to discuss possible modifications to the location of Alternative Route 3 that would avoid impacts to the SCER.

The DEIR states that the Alternative 3 crosses 8.2 miles of critical habitat for Hoover's spurge, San Joaquin Valley Orcutt grass and that Alternatives 2 and 6 cross "about five miles" of critical habitat for San Joaquin Valley Orcutt grass and Hoover's spurge. The report acknowledges that potential impacts are only likely to occur in areas that have the "primary constituent elements (PCE's) for the species survival, yet fails to describe what these elements are and where they specifically occur on the proposed

routes. The DEIR misleads and misinforms the public and decision makers unless the following issues are addressed:

1. What are the PCE's that indicate potential presence of Hoover's spurge and San Joaquin Orcutt grass and where are they specifically found along the Alternative Routes?
2. The DEIR states that "perhaps less than half a linear mile supports the primary constituent elements that are considered essential for the biological needs of Hoover's spurge and San Joaquin Valley Orcutt grass" along Alternatives 2 and 6, but fails to discuss the nature and specific location of the potential habitat.
3. Field surveys for Hoover's spurge and San Joaquin Valley Orcutt grass were conducted in 1992 and reported in *Focused Biological Surveys for Eight Target Species in Tulare County*. These surveys were conducted in one of the wettest years on record and failed to identify any potential habitat for Hoover's spurge or San Joaquin Valley Orcutt grass in the vicinity of reported historic populations near Elderwood and Woodlake.
4. The Biological Resources Study Report prepared by John Stebbins and SCE in June, 2008 concludes that vernal pool habitat in the vicinity of Spring Gap and Colvin Mountain is highly degraded and that there is little likelihood that Hoover's spurge or San Joaquin Valley Orcutt grass occur along the proposed routes outside of the SCER.
5. The DEIR states that potential vernal pool habitat along Alternatives 2, 3 and 6 may not have been apparent during field surveys in Spring 2009 due to below normal rainfall. However, historic weather data from the National Weather Service for Fresno indicates that rainfall for February 2009 was above normal and vernal pools capable of supporting vernal pool fairy shrimp, vernal pool tadpole shrimp, Hoover's spurge and San Joaquin Valley Orcutt grass should have filled during these rainfall events. Aerial photography from the Spring of 1992 should also be available from the Tulare County Resource Management Agency or WAC Corporation.

The DEIR'S conclusion that impacts to listed species present within the Stone Corral Ecological Reserve are unmitigable is not adequately supported. The report does not discuss specific reasons that the avoidance measures proposed for vernal pool habitat along Alternative Routes 2 and 6 can't be implemented along Alternative Route 3. These measures include minor realignment of the route, relocation of tower sites and access roads, and compensation and restoration for impacted habitat. The following facts should be considered and addressed by the DEIR in order to provide an objective analysis of the impacts to biological resources and the feasibility of potential mitigation measures:

1. High quality vernal pool habitat capable of supporting vernal pool tadpole shrimp, California tiger salamander, Hoover's spurge, and San Joaquin Valley Orcutt Grass is strictly limited to the boundaries of the SCER and is further limited to the large claypan vernal pools located in the southwest corner of the SCER north of Avenue 384.
2. Vernal pools in the northwest corner of the SCER are hardpan vernal pools, which tend to be smaller and more ephemeral than claypan vernal pools. While it is likely that these pools support populations of vernal pool fairy shrimp, it is unlikely that they support vernal pool

O22-1

O22-1
cont.

O22-2

tadpole shrimp, California tiger salamander, Hoover’s spurge, and San Joaquin Valley Orcutt Grass.

3. Land adjacent to the SCER is developed to agricultural uses, is abandoned farmland or railroad ROW, or non-native grassland that does not support vernal pools. Realignment of the route into these areas will avoid impacts to listed species.
4. Although areas around the SCER have been designated as critical habitat for vernal pool fairy/tadpole shrimp, California tiger salamander, Hoover’s spurge, and San Joaquin Valley Orcutt grass, the primary constituent elements capable of supporting populations of the listed species are not present and it is highly unlikely that realignment of the project through these areas will result in incidental take of these species.
5. The existing Rector Line traverses the SCER with eight pairs of towers, one of which sits directly within the largest claypan vernal pool at the southwest corner of the Reserve. These towers must certainly have been and will continue to be accessed for repairs and routine maintenance, which will require avoidance measures to prevent incidental take of listed species.
6. There are several opportunities for the acquisition and restoration of abandoned farmland and degraded vernal pool habitat adjacent to, or in the immediate vicinity of, the SCER. Restoration of this compensatory habitat could expand the size of the SCER and provide additional high quality vernal pool habitat capable of supporting the listed vernal pool species.

O22-2
cont.

I have also reviewed the evaluation of proposed alternative alignments prepared by ESA (Pittman Memo July 9, 2009) and find it to be, at best, disingenuous and, at worst, intentionally biased and misleading. The memo vaguely describes potential impacts to biological resources along the Alternative Alignments 3A, 3B and 3C and concludes that the impacts are the same as those occurring within the SCER. However, the analysis of the alternative alignments fails to address the character and quality of the potential habitat and whether the primary constituent elements of critical habitat for vernal pool fairy/tadpole shrimp, California tiger salamander, Hoover’s spurge, and San Joaquin Valley Orcutt Grass are present or absent. It appears that surveys along the proposed alternative alignments were not performed during field surveys in the Spring of 2009 and the information provided in the memo makes it impossible to compare the habitat along the proposed alternatives with the well-documented surveys of habitat within the SCER. Furthermore, it is unclear how the non-native grassland habitat along Alternative Alignment 3C differs from the habitat found along Alternative Routes 2 and 6, which the DEIR concludes can be mitigated to a less than significant level. The memo also discusses a number of non-biological factors which make the alternative alignments infeasible, many of which are present along all of the Proposed Project alignment and Alternative Routes 2 and 6 and go well beyond the scope of evaluation of biological resource impacts.

O22-3

The PACE proposal to re-route the project around the SCER (Alternative 3A) appears to completely avoid impacts to listed species within the Reserve and traverses degraded potential habitat where impacts to sensitive species can be avoided or mitigated by measures recommended for the Proposed Project and Alternative Routes 2 and 6 to a level that is Less Than Significant. This dramatically changes the

O22-4

conclusion of the DEIR that Significant Unmitigable (Unavoidable) Impacts to biological resources occur along Alternative Route 3.

In conclusion, avoidance of impacts to biological resources within the SCER by realignment of the proposed route reduces the potential impacts to biological resources along Alternative Route 3 to a level that is Less Than Significant with Mitigation and puts this alignment on par with potential impacts to biological resources for the Proposed Project and Alternatives 2 and 6. In fact, potential impacts to biological resources along the Proposed Project alignment may be greater than the Alternatives due to proximity to designated critical habitat for the California Condor and a higher likelihood of potential impacts to San Joaquin Valley kit fox that have been documented to utilize citrus orchards as secondary habitat along the southeastern foothills of Tulare County.

O22-4
cont.

Sincerely,

/s/ Gregory S. Kirkpatrick
Gregory S. Kirkpatrick



From: WB Pescosolido [mailto:wb.pescosolido@mac.com]
Sent: Friday, July 31, 2009 6:44 AM
To: San Joaquin Cross Valley Loop Project
Subject: Comments on Draft EIR for Application A.08-05-039

July 31, 2009

Comments on Draft EIR for Application A.08-05-039
From Merryman Ranch Company

VIA E-MAIL & U.S. MAIL

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

In our opinion, the Draft EIR is a good attempt to address the issues raised by the Cross Valley Loop. From our point of view, all the alternatives discussed by the Draft EIR are preferable to SCE's proposed route. But it appears that alternative 3 looks to be the best in that it has by far the least impact on California's prime farm land.

We would like to stress, however, that Merryman Ranch will lose more land under the proposed SCE route than suggested in the Draft EIR. The cost to Merryman Ranch is not just the removed trees for the power line towers and the lost income on them, but also the loss of income from the trees located under the power lines themselves. Those trees will have to be kept trimmed lower so as not to interfere with the lines. And if SCE does not allow the Topping and Hedging machines to trim those trees, due to safety concerns, those trees will have to be removed as well, clear cutting a swath of land through our orange grove.

Irrespective of that, our irrigation lines & system will have to be removed & redesigned, our spraying patterns will have to be changed and several of our wind machines will have to be moved. All at an additional cost than considered in the DEIR.

O23-1

One other item that was not raised in the DEIR is that on our property in the late 1800s one of the first orange groves was planted in Tulare County next to the historic Merryman Station. Those groves are an important link to the past and were the first groves of what would become the center of the Citrus Belt - the best citrus land in the US.

O23-2

Thank you for your consideration in this matter

Winthrop Pescosolido
for Merryman Rac

Re: San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report (SCH No.
2008081090)

Dear Mr. Uchida:

This letter and the table attached hereto contain the comments of Southern California Edison Company (SCE) on the Draft Environmental Impact Report (Draft EIR) for the San Joaquin Cross Valley Loop Transmission Project (Project). While the table provides most of SCE's comments, this letter emphasizes a few general concerns SCE has with the Draft EIR.

I. The Draft EIR Inappropriately Modifies the "basic objectives" of SCE's Project.

The Proponent's Environmental Assessment (PEA) submitted by SCE with the Application for a Certificate of Public Convenience and Necessity for the Proposed Project set forth SCE's basic project objectives for the Project (see, DEIR p. 3-2). However, the preparers of the Draft EIR, without any legal basis for doing so, substituted their own "independent" set of basic project objectives for SCE's project objectives. The preparer's explanation for doing so is to "better define the most important basic objectives of the Proposed Project for use in the alternatives screening process" (DEIR p. 3-3). The preparers further state that "safe and reliable service" is limited by only two critical system constraints: power flow capacity and system strength. As a result, the preparers' adopt only those constraints as basic project objectives (DEIR p. 3-4).

OS24-1

By eliminating SCE's other basic project objectives from further consideration in the Draft EIR, the preparers fail to capture important considerations that SCE took into account in developing the project alternatives and selecting the Proposed Project. For example, by eliminating SCE's basic project objective of reducing "the need to interrupt

customer electrical service under transmission line outage conditions”, the preparers disregarded this concern when comparing the Alternatives contained in the Draft EIR. But in applying this important objective, the route alternatives in the Draft EIR are not equal. The Proposed Project transmission line route is clearly superior to Alternatives 2, 3 and 6 due to its shorter outage requirements needed for construction.

In another example, the preparers eliminate SCE’s objective to meet “project need and construction schedule in a cost effective manner” (DEIR p. 3-3). But in order to satisfy the biological mitigation measures associated with Alternatives 2, 3, and 6 to protect the sensitive biological species associated with vernal pools along the Alternative routes (DIER p. 4.4-46 through 59), SCE would be required to conduct protocol-level surveys and collect 2 years worth of seasonal data prior to consulting with the US Fish and Wildlife Service and California Department of Fish and Game. If species are found to be present, acquiring incidental take permits would add an additional 1 to 10 years of construction delays, depending on whether or not SCE is required develop an HCP. As a result, the Alternatives would fail to achieve the SCE basic project objective stated above. On the other hand, there is no suitable habitat for vernal pools on the areas affected by the Proposed Project, and no protocol level surveys are required for this route. As such the Proposed Project route would clearly meet SCE’s basic project objectives.

II. The Rationale for Choosing Alternative 2 as the Environmentally Superior Alternative is Unsupported.

The preparers of the Draft EIR conclude that Alternative 2 is the Environmentally Superior Alternative solely on the basis that Alternative 2 would convert 12 acres of walnut orchards from production while the Proposed Project would convert 29 acres of walnut orchards from production. While SCE agrees with the Draft EIR conclusion that the removal of walnut trees would not result in conversion of farmland to non-agricultural use, SCE disagrees with the preparers’ conclusion that farmers may or may not re-plant an alternative crop within the ROW, which would “lead to formerly productive Farmland becoming permanently unusable” (DEIR 4.2-15). This conclusion requires a leap of logic that is completely unsupported by the evidence. (CEQA Guidelines § 15384 (a)) This unsupported conclusion inappropriately skews the analysis in favor of Alternative 2.

Additionally, the preparers fail to consider other mitigation measures that would lessen the impacts to walnut trees, such as an increase in transmission pole height where productive walnut groves are currently present and would otherwise interfere with towers as currently described for the Proposed Project. Increasing the pole height could avoid the permanent removal of many of the walnut trees and mitigate the impacts to a level similar to those associated with the citrus orchards (DEIR p. 4.2-15). Finally, the Draft EIR ignores (or inadequately considers) other impacts that should be considered when comparing the Proposed Project to the Alternative routes, such as impacts to federally

OS24-1
cont.

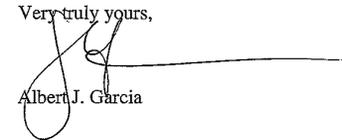
OS24-2

protected resources that are present on Alternative Routes 2, 3 and 6 and that are not present on the Proposed Project route.

III. The EMF Discussion Should Not Be Included In the Draft EIR

The Draft EIR improperly includes an analysis of electric and magnetic fields (EMF). EMF is not a CEQA issue. Although the Draft EIR recognizes that EMF is not considered in the context of CEQA (DEIR p. 2-41), the discussion of EMF is inappropriately included within the actual Draft EIR document for informational purposes. However, including this information within the Hazards and Hazardous Materials Section (or anywhere within the main body of the document) is misleading to the public and is beyond the scope of CEQA. In addition, as also recognized in the Draft EIR, there are no Federal or State standards relating to human exposure to EMF, and there is a lack of consensus in the scientific community regarding this issue. For these reasons, the Final EIR should not include an analysis of EMF.

Very truly yours,


Albert J. Garcia

cc: Dana Bullock
Susan Nelson
Erika Wilder

Enclosure(s)

OS24-2
cont.

OS24-3

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
1	Global		The document does not fully account for the many existing agricultural uses of the region, many of which are very similar to construction activities and operations, including, e.g., the presence of packing houses and other industrial agricultural facilities and staging areas, the common presence of slow-moving agricultural machinery on the roads, the common use of hazardous materials at low concentrations, and routine noise-producing agricultural operations that occur during daylight hours on weekdays and weekends.
2	ES-1	ES.1 Introduction/Background, 2nd paragraph “...while the other two lines begin at Big Creek and terminate at the Springville 220/66 kV Substation (Big Creek 3-Springville 220 kV transmission line and Big Creek 4-220 kV transmission line).”	The name of the second circuit is the Big Creek 4-Springville 220 kV transmission line.
3	ES-14	Table ES-2 Summary of Significant Unmitigable... “Proposed Project would result in the conversion of Farmland to nonagricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.”	This is not an unmitigable impact. SCE has the option of re-engineering the project to raise the heights of the structures to allow for 40 foot high orchards beneath the conductor.
4	2-20	Section 2.5.3, Poles and Towers, 1st paragraph ...where extra structuring strength...	Change “structuring” to “structural”
5	2-20	Table 2-2 Summary of Pole Information	The number, the type, the configuration, and the height of structures would be subject to final engineering.
6	2-22	2.6 Right-of-Way Requirements, 1st paragraph ...including condemnation of a 2,800 square foot residence located within the ROW to be acquired.	The sentence in the draft EIR presupposes that SCE will condemn the residence. Suggest changing the word “condemnation” to “acquisition”.

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
7	2-22 & 2-24	Right of Way Requirements These roads would require the acquisition of approximately 2.1 acres of new ROW.	“ROW” should be changed to “access road easements”.
8	2-24	Top of page ...private ranching roads would be used...	Delete the word “ranching,” as private roads are likely used for purposes other than ranching.
9	2-26	Table 2-4 Pole and Tower Installation Metrics	The numbers and heights of poles and towers shown to be installed/removed are approximate; the exact numbers and heights may vary following completion of final engineering.
10	2-29	Conductor Shield Wire Stringing section, 1st sentence ...IEEE Standard 524-1992...	The latest correct reference to the IEEE standards should be to the IEEE Standard 524-2003.
11	2-33	Stormwater Pollution and Prevention	This information appears in an incorrect place in the document. SCE would have a SWPPP in place prior to the start of construction.
12	2-39	Table 2-8 Proposed Construction Timetable	The reference incorrectly attributes the information in the third column of this table to SCE, and incorrectly indicates that construction would be complete by November 2013. The estimated project operating date is October 2012, which is also the construction completion date.
13	2-40	2.8.1 220 kV Transmission Lines, 1st paragraph This involves both routing preventative maintenance...	“routing” should be “routine.”

Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
14	2-40	2.8.1 220kV Transmission Lines, 3rd paragraph "Maintenance of the transmission facilities would include limitations on certain land uses and maintenance of vegetation height within the ROW. Land uses that would typically be permitted within the ROW after project completion include agricultural and landscaping, underground facilities, biking and hiking trails, and automotive vehicle parking. Specific requirements associated with these activities include:"	Change text to read: "Maintenance of the transmission facilities would include limitations on certain land uses that may restrict SCE's ability to have unrestricted 24/7 access to the ROW and its transmission facilities, and property owner maintenance of vegetation heights within the ROW. After review and approval by SCE, land uses that would typically be permitted within the ROW after project completion include agricultural and landscaping, underground facilities, biking and hiking trails, and automotive vehicle parking. SCE's guidelines associated with these activities include:"
15	2-41	2.9 Electric and Magnetic Fields Summary	This is not a part of the CEQA analysis and should be removed from the Project Description.
16	2-41	2nd paragraph of 2.9.1 Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix D.	Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix B.
17	2-41	"Potential health effects from exposure to <i>electric field</i> from transmission lines (i.e. the effect produced by the existence of an electrical charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) typically do not present a human health risk since electric fields are effectively shielded by materials such as trees, walls, etc."	This is confusing and inaccurate. Suggested change: "Potential health effects from exposure to electric field from transmission lines (i.e. the force field produced by the existence of an electrical charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) have not been established. They are generally not thought to be of concern since electric fields are effectively shielded by materials such as trees, walls, structures , etc." Furthermore, please see comments contained in the cover letter.
18	3-2	3rd Paragraph CEQA Guidelines (Section 15126(a)) . . ."	Should read "CEQA Guidelines (Section 15126.2(a)) . . ."

Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
19	3-2	5th paragraph ...(Section 16126.6(b).	Should read (Section 15126.6(b)).
20	3-6	Biological Resources bullet Permanent impacts to ... vernal pool fairy shrimp.	Appropriate vernal pool habitat is not present in the Proposed Project area.
21	3-6	Table 3-1, Hazards and Hazardous Materials bullet "Impacts to surface or groundwater from construction-related use of hazardous materials"	Change text to read: " Potential for impacts to surface or groundwater from construction-related use of hazardous materials" The construction activities will not impact groundwater unless an accidental spill or discharge occurs.
22	3-6	Land Use and Planning bullet Potential conflict with the City of Farmersville General Plan	The environmental analysis does not identify this as a significant environmental effect of the Proposed Project. This bullet should be removed.
23	3-6	Population and Housing bullet Permanent removal of one home	The environmental analysis does not identify this as a significant environmental effect of the Proposed Project. This bullet should be removed.
24	3-7	Alternative 2, Passes Screening, 3rd bullet	Alternative 2 may avoid the communities of Farmersville and Lemon Cove, but it does not avoid the community of Elderwood.

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
25	3-7	Table 3-2 Summary of Alternatives Screening Analysis	<p>Table 3-2 provides a "Total Length" comparison for each of the route alternatives. This comparison appears to be based on corridor miles (length of the corridor) and not circuit miles (length of new transmission line circuits). Use of circuit miles, rather than corridor length, would more accurately convey the differences in construction work required between each of the project route alternatives. In particular, the "Total Length" shown on the table for each route alternative does not include the additional transmission line removal and rebuild work required for the portion of each route alternative that is located in the Big Creek corridor. In order to more accurately compare alternatives based on the total length of the alternative, the "Total Length" should include the additional amount of removal and rebuild work required for each alternative.</p> <p>The total length of the Alternatives are as follows: Proposed Project: 19.6 miles of double circuit construction Alternative 2: 33.8 miles of double circuit construction Alternative 3: 38.9 miles of double circuit construction Alternative 6: 28.6 miles of double circuit construction</p>
26	3-8	Reconductoring, Feasibility Criteria	Based on SCE's basic project objectives, acquiring permits to reconductor may not be possible within the timeframe needed to serve electrical service reliability.
27	3-8	Replacement, Feasibility Criteria	Based on SCE's basic project objectives, acquiring permits to replace existing structures may not be possible within the timeframe needed to serve electrical service reliability.
28	3-10	3.4 Alternatives Evaluated in this EIR Entire section	This section fails to compare each alternative to the basic objectives of the project as defined by SCE.

O24-27

O24-28

O24-29

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
29	3-11	First paragraph Work areas...would be required outside the ROW at Alternative 2....	Work areas outside the ROW may be required, and is unknown at this time.
30	3-12	"Implementation of this alternative would include similar construction, operation and maintenance activities to those activities described for the Proposed Project except the Alternative 2 alignment would take approximately 20 months to construct assuming there are no outage constraints. Given that combined work activities in the existing ROW are expected to exceed six months, an additional six to 12 months may be required to work around the April 1 through October 1 outage restrictions. Table 3-5 below summarizes the length of time anticipated to construct each phase of Alternative 2. This alternative is 4.5 miles longer and involves replacement of existing structures on 9.7 more miles than the Proposed Project requiring the removal and installation of more towers and poles than under the Proposed Project."	Depending on timing of the final CPUC CPCN decision, completion of mitigation measures, property rights acquisition, final engineering and procurement activities, and transmission line outage requirements, SCE may be required to take steps to accelerate field construction activities in order to meet the October 2012 Operating Date.
31	3-13	Alternative 2, Lessen Significant Environmental Impacts ...permanent removal of fewer acres of Farmland than the Proposed Project...	Alternative 2 would cross approximately 226 acres of Farmland, and the Proposed Project would cross approximately 208 acres. Alternative 2 would cross approximately 17.5 more acres of Farmland than the Proposed Project.
32	3-13	Alternative 2, Lessen Significant Environmental Impacts ... and would also permanently remove fewer acres of walnut orchards from production.	This is not a CEQA criterion.

O24-30

O24-31

O24-32

O24-33

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment	
33	3-14	1st paragraph Work areas...would be required outside the ROW at Alternative 2....	Work areas outside the ROW may be required, and is unknown at this time.	O24-34
34	3-15	"Implementation of this alternative would include similar construction, operation and maintenance activities to those described for the Proposed Project except that Alternative 3 would take approximately 24 months assuming there are no outage constraints. Table 3-8 below summarizes the length of time estimated to construct each phase of Alternative 3. This alternative would be 5.8 miles longer and involves replacement of existing structures on 13.5 more miles than the Proposed Project. The terrain for Alternative 3 is more rugged requiring the construction of more miles of access roads than the Proposed Project."	Depending on timing of the final CPUC CPCN decision, completion of mitigation measures, property rights acquisition, final engineering and procurement activities, and transmission line outage requirements, SCE may be required to take steps to accelerate field construction activities in order to meet the October 2012 Operating Date.	O24-35
35	3-16	Alternative 3, Lessen Significant Environmental Impacts ... and would also permanently remove fewer acres of walnut orchards from production.	This is not a CEQA criterion.	O24-36
36	3-17	1st paragraph ...112 additional structures removed...	Same comment as Comment #5 below.	O24-37
37	3-17	Tables 3-9 and 3-10 Alternative 6	Same comment as Comment #5 below.	O24-38
38	3-19	Alternative 6, Lessen Significant Environmental Impacts ... and would also permanently remove fewer acres of walnut orchards from production.	This is not a CEQA criterion.	O24-39

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment	
39	4.1-16	Viewer Types and Exposures ...and visitors to the Kaweah Oaks Preserve and Cutler Park...	Visitors to the Kaweah Oaks Preserve and Cutler Park would have views of Alternatives 1, 2, 3, and 6 that are almost completely obscured by vegetation; or in the case of the Kaweah Oaks Preserve, the southernmost preserve trails are below the grade of Highway 198, and views of Alternative 1 would be obscured by both vegetation and traffic.	O24-40
40	4.1-19	Park and Recreation Areas, 1st paragraph ...recreational viewers, including hikers using trails that traverse the [Kaweah Oaks] Preserve, would have limited views of the Proposed Project alignment...	Please see Comment #39 below.	O24-41
41	4.1-19	Park and Recreation Areas, 2nd paragraph Views [from visitors to Cutler Park] of Alternatives 2 and 3 alignments would generally be obstructed by vegetation and terrain	If it is believed that Alternatives 2 and 3 are visible from Cutler Park, then Alternative 6 would also be visible.	O24-42
42	4.1-22	Tulare County Zoning Ordinance The Proposed Project would traverse parcels zoned SC...	The Proposed Project has one structure at the extreme southeast corner of one parcel zoned SC.	O24-43
43	4.1-38	Impact 4.1-1, 2nd paragraph ...including a set of new tubular steel poles...	Same comment as Comment #5 below.	O24-44
44	4.1-38	1st paragraph The new structures #20 and #21, 130 foot tubular steel poles...	Same comment as Comment #5 below.	O24-44
45	4.1-40	Mitigation Measure 4.1-1a Treat Surfaces with Appropriate Colors, Finishes, and Textures	This mitigation measure is misclassified as mitigating a scenic resource within a State scenic highway. The effects would be more appropriately discussed as a change in the visual character or quality of the site and its surroundings.	O24-45

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
46	4.1.40 8-9	MM 4.1-1a: Treat Surfaces w/ Appropriate Color...	<p>The requirement that SCE prepare a Surface Structure Treatment Plan 90 days in advance of construction would prevent SCE from meeting its project scheduling objective, given that engineered tubular steel pole (TSP) transmission structures are long lead procurement items. TSPs may take approximately 18-24 months to design, engineer, and procure. It will not be likely for changes to be made to any factory-applied surface coatings beyond those identified in the PEA (i.e., dull grey galvanized finish). While SCE may be able to provide documentation of any planned surface coatings within 90 days in advance of construction, there will be no opportunity to modify factory applied surface coatings without significant delay to the project construction schedule and at significant costs, particularly after structures have been designed, ordered, and fabricated.</p> <p>"Review and approval" is undefined and no objective review criteria has been provided for streamlined implementation this proposed mitigation measure. Accordingly, delays to the project engineering, procurement, and construction schedule would be likely if such "review and approval is left to the field judgment of a third-party visual specialist that may not be familiar the project, the project area, the community. SCE will utilize surface structure treatments, consistent with those identified in the PEA description, and will provide CPUC notice if any deviation from that description is necessary for any particular structures.</p>

O24-46

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
47	4.1-41	MM 4.1-2: Reduce Visibility of Staging Area	<p>The 4.1.-2 requirement to "submit final construction plans to CPUC for review" should be clearly limited to providing documentation of any plans for the location and general construction of temporary staging areas. In areas where the additional visual impact to the surrounding temporary staging area is expected to be minimal, or non-existent, this measure should not apply to such areas.</p> <p>The use of "light brown vinyl slats" as aesthetic treatment for chain link fencing will lead to additional project costs. This requirement should be deleted or modified to allow for use of other screening techniques for those staging areas that warrant screening.</p> <p>This measure should be modified to more clearly reflect it does not apply to individual pole or tower construction locations, at which the duration of construction activities will be relatively short compared to overall construction.</p>
48	4.1-41	Mitigation Measure 4.1-2: Reduce visibility of staging areas. All staging areas including storage sites for excavated materials, and helicopter fly yards, shall be appropriately located away from areas of high public visibility.	"appropriately located away from areas of high public visibility" is undefined, and no objective review criteria has been specified.
49	4.1-41	Mitigation Measure 4.1.3 SCE shall not place equipment on the pulling/splicing site any sooner than two weeks prior to the required use...	The DEIR does not provide a justification for application of an "absolute" two week time frame. This measure should be modified to allow SCE to request additional time to place equipment on the pulling/splicing sites beyond the two weeks prior to the required use, if site-specific circumstances warrant such additional time. For example, if an environmental mitigation issue arises after equipment has been located, and resolution of that issues extends beyond two weeks, it may be impracticable, as well as costly to move the equipment off of the site only to move it back on a short while later.

O24-47

O24-48

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
50	4.1-50	Mitigation Measure 4.1-6 – Reduce construction night lighting impacts	<p>This measure incorrectly assumes that SCE will be constructing a new substation-type project at one discrete fixed location for the entire duration of construction, rather than a long linear transmission line project such as SJXVL for which the construction duration at each work location may be temporary. The need for any SJXVL construction lights, if at all, and the precise type and location of such lighting will depend on the many site-specific circumstances at each tower construction location. If construction lighting were necessary at any of these locations, the use of such lighting would be limited in duration during the construction of individual towers. Moreover, the impact would also be very short term in duration relative to the entire construction project duration.</p> <p>This measure should either be eliminated as inapplicable, or re-drafted to indicate that SCE to provide the CPUC generic construction lighting plan that would apply to all storage yards and potential tower construction sites, and generally identify when lighting may be necessary at such locations and how it would be utilized, if at all, for such limited short term durations.</p>
51	4.1-46	State Route 245 New tubular steel poles...	Same comment as Comment #5 below.
52	4.1-47	Top of page ...more prominent than existing utility infrastructure.	The wind machines are agricultural infrastructure.
53	4.1-47	2nd paragraph ...(Structure #82, a 120-foot tubular steel pole)...	Same comment as Comment #5 below.
54	4.1-48	Local Roadways and Private Residences, 1st paragraph Nonetheless, the new tubular steel poles...	Same comment as Comment #5 below.

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
55	4.1-48	Local Roadways and Private Residences, 2nd paragraph Structure #102, a 130-foot tall tubular steel pole...; ...including Structure #102A (a 130-foot tall tubular steel pole...); ...Structure #103 (a 120-foot tubular steel pole...)	Same comment as Comment #5 below.
56	4.1-54	...whereas the Proposed Project would be visible from SR 245 for several miles.	This is unlikely. Also, most analyses use views within a quarter mile or a half mile of a project when determining visual impacts.

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
57	4.2-11	<p>Mitigation Measure 4.2-1a</p> <p>SCE and/or its contractors shall ensure that the following measures are taken, during construction of the Proposed Project:</p> <p>Replace soils in a manner that shall minimize any negative impacts on crop productivity. The surface and subsurface layers shall be stockpiled separately and returned to their appropriate locations in the soil profile.</p> <p>To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top three feet) to within five percent of original density.</p> <p>Where necessary, the top soil layers shall be ripped to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers.</p> <p>Avoid working or traveling on wet soil to minimize compaction and loss of soil structure.</p> <p>Remove all construction-related debris from the soil surface. This shall prevent rock, gravel, and construction debris from interfering with agricultural activities.</p> <p>Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.</p>	<p>The replacement of soils on any privately-owned croplands would normally be arranged for directly between SCE and the private property owners, and as such, may be different than that specified in the first bullet of Measure 4.2.1 a.</p> <p>The first bullet "Replace soils in a manner that shall minimize any negative impacts on crop productivity. The surface and subsurface layers shall be stockpiled separately and returned to their appropriate locations in the soil profile" should be eliminated from the Final EIR, and SCE and individual property owners should be allowed to develop and reach a mutual agreement for the disposition of any soils that are impacted on such property.</p> <p>The density for soils associated with installation of transmission tower foundations will be determined during the engineering phase and could vary more than 5% from the original soil density in order to meet engineering requirements. Accordingly, the second bullet "To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top three feet) to within five percent of original density" should be deleted. Compaction of soils to this criteria may lead to unacceptable conditions for installation of tower foundations.</p>

O24-54

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
58	4.2-12	<p>1st Bullet</p> <p>Avoid working or traveling on wet soil to minimize compaction and loss of soil structure.</p>	<p>SCE will work and travel on wet soil because the soil will be sprayed by a water truck to control dust per air quality rules.</p> <p>SCE would make every effort to minimize damage to soils during construction. The restoration of soils on privately-owned land would be arranged for directly between SCE and the private property owners as part of the easement negotiation.</p>
59	4.2-12	<p>Impact 4.2-2</p> <p>A 50-foot maintenance buffer would surround each pole and tower (SCE, 2008a).</p>	<p>SCE's clearance requirements around poles and towers are 50 feet for suspension structures (poles), and 100 feet for dead-end structures (towers) within the ROW.</p>

O24-55

O24-56

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
60	4.2-12	Mitigation Measure 4.2-1b Coordinate construction scheduling as practicable so as to minimize disruption of agricultural operations by scheduling excavation to occur before or after the growing season.	<p>"Growing season" is undefined and may vary depending on crop type and the particular landowner.</p> <p>The requirement that "SCE to submit documentation of construction schedule in comparison to growing seasons to CPUC for review" is unnecessary. SCE intends to coordinate construction scheduling directly with affected landowners and minimize disruption to any agricultural operations. The requirement that "Supply replacement crops and trees at a mitigation ratio of one to one, upon completion of construction" should similarly be deleted, as requirements for crop replacement should be the subject of bilateral agreement between SCE and the underlying property owner. Replacing crops on a one for one basis may be excessive, as crops have a limited lifespan and landowners would be fully compensated for any crop take. Additionally, the crops may have been grown temporarily to be replaced by nut or fruit trees.</p> <p>The requirement that SCE submit documentation to CPUC demonstrating landowner coordination and location of replacement crops and trees should be deleted as it is vague, overbroad, burdensome and may be ineffective at improving or tracking SCE coordination with individual property owners. Depending on the final route alternative selection, SCE may need to engage in multiple discussions with as many as 50 to 100 different property owners and/or their representatives during the construction of SJXVL to address multiple issues. The discussions with each property owner may include, but will not be limited to obtaining temporary entry permits to perform engineering and environmental surveys, negotiating acquisition of rights-of-way, relocation of irrigation lines and other structures, and staging of site-specific construction, construction activities, and cleanup. These multiple discussions with multiple property owners will be conducted by multiple engineering, real estate, and construction personnel. These discussions may be ongoing and continuous during the entire engineering and construction period.</p>

O24-57

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
61	4.2-12 8-12	Mitigation Measure 4.2-1b Supply replacement crops and trees at a mitigation ratio of one to one, upon completion of construction. Coordinate planting of replacement crops and trees with landowners.	Crop and tree replacement is an economic consideration and is not a significant environmental impact. Therefore, mitigation does not apply. Requirements for crop replacement are the subject of bilateral agreement between SCE and the underlying property owner, and are not the subject of an unsupported CPUC mandate. Replacing crops on a one for one basis would likely be excessive, as crops have a limited lifespan and landowners would be fully compensated for any crop take.
62	4.2-13	Footnote SCE's policy is to maintain a 50-foot maintenance area...	Same comment as number 59 below.
63	4.2-14	Mitigation Measure 4.2-2 For each acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that is permanently converted, SCE shall obtain one (1) acre of agricultural conservation easements. An agricultural conservation easement is a voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture. The easement places legally enforceable restrictions on the land. The exact terms of the easement are negotiated, but restricted activities shall include subdivision of that property, non-farm development, and other uses that are inconsistent with agricultural production. The mitigation lands must be of equal or better quality (according to the latest available FMMP data) and have an adequate water supply. In addition, the mitigation lands must be within the same county as the impact.	<p>The procurement of such conservation easements would essentially double the amount of land needed to be acquired for the project, which would lead to at least a comparable increase in real estate acquisition costs not currently included in SCE's cost estimate, nor evaluated in the DEIR.</p> <p>The agricultural lands that may be impacted by the SJXVL project are not likely subject to similar restrictions if it were to be developed by a third party. The City of Visalia does not have a program for mitigating Farmland impacts, nor does the City of Farmersville. Tulare County updated its General Plan in 2008, and set forth a new policy to work with the Tulare County Association of Governments to develop a conservation easement program, but no program has yet been established.</p> <p>In addition, the term "permanently converted" is undefined in the context of land used for transmission line easements. The DEIR also does not recognize the Farmland that has already been converted by a change in designation in a General or Specific Plan, and has not been found to have an impact associated with the conversion.</p>

O24-58

O24-59

O24-60

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
64	4.2-15	Impact 4.2-4, 2nd paragraph Furthermore, farmers may or may not replant an alternative crop within the ROW. In effect, this would lead to formerly productive Farmland becoming permanently unusable.	The "farmers" decision as to whether or not to plant crops does not render Farmland "permanently" unusable. Ultimately, the decision to plant or not to plant would be an economic one that the underlying fee property would make.
65	4.2-16	Mitigation Measure 4.2-5 Coordinate with landowners to ensure that construction does not impact irrigation and/or other ancillary farming systems to a degree that farming practices cannot be maintained.	The CPUC should not have a role in the review and approval of detailed designs or construction plans as a prerequisite to any agreement between SCE and individual property owners for relocation of existing irrigation and drainage facilities. Coordination with landowners would typically be part of SCE's normal business practice. Any relocation or temporary displacement of existing drainage and irrigation systems due to construction within the project area would be based on negotiations and final agreement with the affected property owners, irrigation agency, etc. It is not reasonable to expect SCE or its Contractor to develop Construction Plans that show measures used for every existing drainage and irrigation systems and provide documentation demonstrating compliance to the CPUC for review and approval.
66	4.2-17	Alternative 2, 2nd paragraph Alternative 2 crosses proportionately less Farmland than the Proposed Project.	This statement is incorrect. In fact, Alternative 2 would cross approximately 226 acres of Farmland, and the Proposed Project would cross approximately 208 acres. Alternative 2 would cross approximately 17.5 more acres of Farmland than the Proposed Project.
67	4.3-2	Existing Air Quality, 1st paragraph ...the Visalia-North Church monitoring station located approximately three miles northeast of the Rector Substation.	Northwest?

O24-61

O24-62

O24-63

O24-64

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
68	4.3-6	Greenhouse Gas Emissions and Climate Change, 1st paragraph ...emissions from human activities such as electricity production and the use of motor vehicles have elevated the concentration of GHGs in the atmosphere.	In fact, it is the use of carbon-based fossil fuels that have contributed to the increase in concentration of GHGs in the atmosphere. There are several sources of electricity generation (i.e., hydropower, wind) that do not contribute to an increase in GHG concentrations, as well as there are vehicles powered by non-fossil based fuels that would not contribute to an increase in GHG concentrations.
69	4.3-18	Mitigation Measure 4.3-1a SCE shall submit an Air Impact Assessment application to the SJVAPCD ...	Mitigation Measure 4.3-1a would impose a 10 tons/year ceiling on NOx emissions for construction related activities rather than, as is more appropriate, a significance threshold for construction-related emissions. This mitigation measure may make Alternative 2 (and, for that matter, Alternatives 3 and 6) infeasible with an imposed arbitrary construction emissions constraint. Alternative 2 involves more transmission construction than the Proposed Project; for example, Alternative 2 involves construction of 33.8 miles of new double circuit transmission construction as compared to 19.6 miles for the Proposed Project. However all alternatives face the same construction-related constraints including a 6 month annual outage availability window and electrical system reliability requirements during construction. Therefore, construction of Alternatives 2, 3 and 6 would likely require more aggressive construction methods and practices than would be required for Alternative 1. This would increase the estimated annual NOx emissions for Alternatives 2, 3 or 6 beyond the annual levels shown in Table 4.3-4 and potentially make it infeasible to meet this specific mitigation measure for any project except Alternative 1. As stated on page 4.3-17, the project is not subject to the SJVAPCD Indirect Source Review (Rule 9510).

O24-65

O24-66

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
70	4.3-19 and 20	Mitigation Measure 4.3-1b SCE and/or its contractors shall implement the following dust control measures.	SCE and its contractors will comply with the Regulation VIII Control Measures for Construction Emissions of PM10 as set forth by the San Joaquin Valley Air Pollution Control District during construction of the project. In addition, the SJVAPCD Enhanced Control Measures and Additional Control Measures (bullets 8 through 12) are applicable to construction sites that are large in area, and do not apply to a 200 by 200 foot area cleared to install a transmission structure. In addition, the requirement to install sandbags is not a dust control measure, but is an erosion control measure. As such, it should be removed from this mitigation measure. The requirement to "Suspend excavation and grading activity when winds exceed 20 mph" should be limited to those activities wherein other dust control measures (use of water or other dust suppressants) are no longer effective.

O24-67

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
71	4.3-20	Mitigation Measure 4.3-3 After construction, SCE shall, in perpetuity, utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions...	This mitigation measure does not mitigate a significant impact. This is an unreasonable and burdensome solution to an insignificant issue; there are thousands of miles of existing dirt roads in the project area. Additionally, there is no other area in SCE's territory that such a measure as this is in place or being contemplated after project construction and in perpetuity. This will create a laborious and costly on-going maintenance issue (at the ratepayers' expense) for SCE on property that it does not own. There will be other parties that utilize these access roads and will create fugitive dust emissions besides SCE. It is the property owner's responsibility to maintain their property not required as part of SCE's O&M clearance area, per the terms of the easement acquired by SCE. Further, it is unclear whether property owners would even want gravel and chemical stabilizers placed on their property by SCE, as it may lead to an unwanted traffic increase by other users avoiding other dirt roads to travel on a property owner's gravel road. In addition, any reference to activities conducted during operation of the project should specifically state "during operation of the project", and not state "in perpetuity".

O24-68

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
72	4.3-27	<p>First paragraph</p> <p>While the annualized greenhouse gas emissions associated with the Proposed Project would be substantially less than CARB's preliminary draft threshold amount of 7,000 metric tons CO₂e, significance for this project is also based on whether the Proposed Project would be consistent with the State's greenhouse gas reduction goal under AB 32, which would require a minimum 30 percent reduction of greenhouse gases by 2020 compared to business as usual conditions.</p>	<p>The statement that "significance for this project is also based on whether the Proposed Project would be consistent with the State's greenhouse gas reduction goal under AB 32, which would require a minimum 30 percent reduction of greenhouse gases by 2020 compared to business as usual conditions" is in error. A project that does not individually reduce its emissions by 30 percent is not necessarily in conflict with AB 32. Additionally, this criterion is not one of the two criteria stated on Page 4.3-24.</p> <p>By demonstrating that the project is consistent with CARB's 39 Recommended Actions, or would be expected to emit fewer than 7,000 metric tons per year of CO₂e during operation, the Proposed Project would be consistent with AB 32.</p>
73	4.3-27	<p>Mitigation Measure 4.3-8a</p> <p>...SCE shall enter into a binding agreement to purchase carbon offsets credits...</p>	<p>As discussed in Comment #72 above, the preparers have not shown with sufficient evidence how or why the Proposed Project is inconsistent with AB32. Accordingly, SCE requests that the analysis be revised to reflect this comment and that this proposed mitigation measure be deleted.</p>

O24-69

O24-70

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
74	4.3-28	<p>Mitigation Measure 4.3-8b</p> <p>During construction, SCE shall dispose of all removed trees and other green waste via the Tulare County's Wood and Green Waste Program. To ensure compliance with this program, SCE shall:</p> <p>Collect all wood and green waste generated from the removal of orchard trees separately from other construction and demolition waste, and place wood and green waste in a separate recovery area;</p> <p>Keep wood and green waste free of contaminants such as dirt, rock concrete, plastic, metal and other contaminants which can damage wood waste processing equipment, and reduce the quality of the compost; and</p> <p>Prohibit the inclusion of yucca leaves, palm fronds or bamboo (which cannot be included in the salvage program) from the wood and green waste recovery area.</p>	<p>Landowners may want the opportunity to keep removed trees and green waste for their own purposes.</p> <p>There may be other comparable wood and green waste programs in addition to the Tulare County program.</p> <p>For removed trees and green wastes that need to be removed from properties, SCE should be allowed to dispose of removed trees and green waste at any comparable wood and green waste facility.</p>

O24-71

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
75	4.3-28	<p>Mitigation Measure 4.3-8c</p> <p>Prior to the conclusion of construction, SCE shall establish, fund, and implement a tree replacement program with the Urban Tree Foundation of Visalia, CA (or other comparable organization in Tulare County) for the replacement of all permanently removed orchard trees on a 1.5 to 1 basis. The tree replacement program shall provide for the Urban Tree Foundation to select the tree species and suitable locations for the plantings, and shall also provide for the maintenance of the plantings for a minimum of one full year to maximize survival rate. SCE shall provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings. (Note: it is the intent of this mitigation measure to offset the loss of carbon sequestration from the permanent loss of trees, not to replace the loss of a particular crop; therefore, it is not required that the replacement trees be orchard species.)</p>	<p>This mitigation measure not roughly proportional to the impact. Further, there is no appropriate rationale for this mitigation measure, as there is no environmental impact. Fundamentally, the trees being removed are crop trees. Their function is economic: to produce crops. These are not naturally occurring trees, nor are they trees planted for the enjoyment of others or recreational purposes. These trees are a fungible commodity, not an environmental resource. The trees have a useful production life and are removed at the end of their useful life. Further, they can be removed or replaced at any time without mitigation by farmers. Farmers are never required to mitigate for crop trees in this manner when their crop trees are removed from production. Likewise, developers removing crop trees to make room for homes or buildings are not required to mitigate their crop trees. The reason is because there is no legal requirement for them to do so. So why would SCE be treated so differently? To do so would set a precedent that could stifle proper planned economic development of land from agriculture to residential/commercial land uses by others in the Central Valley. Further, allowing such a mitigation measure could produce unintended consequences, such as having farmers change the types of crops they plant from trees to other types of plants in order to avoid costly replacement programs. Finally, the logic of this mitigation measure (or lack thereof) would not stop at trees. It could even be applied to row crops as well. Because this measure does not mitigate an impact, it should be stricken.</p> <p>Finally, DEIR indicates SCE will have to replace approximately 2,900 x 1.5 = 4,350 trees. The cost to implement this measure are unknown, are expected to be significant, and are not reflected in the SCE cost estimate provided to the CPUC in the CPCN proceeding.</p> <p>But even assuming there the intent is carbon sequestration, the phrase "in Tulare County" should be stricken to have the flexibility to plant trees anywhere in California.</p>

O24-72

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
76	4.3-30	<p>Alternative 3, 1st paragraph</p> <p>However, since construction activities associated with Alternative 3 would be spread over a longer time period...</p>	<p>It is unlikely that the teardown and rebuild of the existing corridor could be completed within the limited outage timeframes allowed by the CAISO, and construction activities within the existing corridor associated with this route would likely be more intense.</p>
77	4.4-5	<p>Annual Grassland, 4th paragraph</p> <p>The burrowing owl is an uncommon resident of grasslands in the study area.</p>	<p>Burrowing owls are common to grassland areas.</p>
78	4.4-15	<p>Vernal Pool Tadpole Shrimp, 2nd paragraph</p> <p>...is presumed present in all vernal pool habitats in or near the Proposed Project...</p>	<p>Appropriate vernal pool habitat is not present in the Proposed Project area.</p>
79	4.4-16	<p>Golden Eagle</p> <p>Potential nesting sites are available under Alternatives 2 and 6, where woodlands occur near the ROW.</p>	<p>Golden eagle have been observed on Alternative 2.</p>
80	4.4-19	<p>Non-listed Plants, Spiny-sepal'd Button-celery</p> <p>This species is also reported from the easternmost three miles of the Alternative 3 ROW.</p>	<p>This species is also reported from the easternmost three miles of the Alternatives 2 and 6 ROW.</p>

O24-73

O24-74

O24-75

O24-76

O24-77

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
81	4.4-31	Mitigation Measure 4.4-1a: Rare plant surveys. SCE and/or its contractors shall conduct preconstruction surveys following CDFG and USFWS special-status plant survey guidelines to determine if populations are present in unsurveyed areas. Surveys shall document the location, extent, and size of special-status plant populations, if present, and shall be used to inform the planned avoidance of rare plant populations whenever possible. To the extent feasible, the final project design shall minimize impacts on known special status plant populations that are identified in the project area (e.g., by routing access roads away from plant populations). SCE and/or its contractors shall establish an appropriate exclusion zone (e.g., greater than 50 feet) to minimize the potential for direct and indirect impacts such as fugitive dust and accidental intrusion into sensitive areas (see Mitigation Measure 4.3-1b for dust control measures). The exclusion zone shall be staked and flagged in the field by a qualified botanist prior to construction.	SCE would need to obtain rights-of-entry from each property owner to secure access to conduct surveys. If there are unwilling property owners, SCE would need to obtain a court order to secure such temporary access, which could take approximately 2-3 months for each property owner. Special-status plants have not been observed on the Proposed Project, but they have been observed on Alternatives 2, 3, and 6.
			O24-78
82	4.4-32	Mitigation Measure 4.4-1c The plan shall be reviewed and approved by Tulare County...	Who or which department from Tulare County would be reviewing and approving the document?
			O24-79
83	4.4-34	Mitigation Measure 4.4-3a, 2nd bullet ...before the start of each new construction phase....	SCE proposes nesting surveys prior to construction in the phases outlined below: 1. Prior to the start of construction in the existing corridor; 2. Prior to the start of construction between the existing BC-Rector corridor and the connection point; and 3. At any location that has not been worked at for more than 14 days.
			O24-80

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
84	4.4-34	Mitigation Measure 4.4-3a, 4th bullet (Swainson's hawk) ...conduct preconstruction surveys at least 14 days prior to construction...	This bullet is not consistent with the 2nd bullet, which states ...perform a preconstruction survey 14 to 30 days before the start of each new construction phase... Should a preconstruction survey be conducted within 14 days or 30 days?
			O24-81
85	4.4-37	Impact 4.4-7 ...raptor behavior and pole design.	Structure design would be a more appropriate term to use.
			O24-82
86	4.4-37	Mitigation Measure 4.4-6, 1st bullet ...evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights.	Inert tracking medium utilized for potential dens is not specified in the protocol survey requirements.
			O24-83
87	4.4-39	Part of Mitigation 4.4-7, Third bullet Shield wires to minimize the effects from bird collisions.	In areas of high avian collision risk, bird diverters (such as swan flight diverters) are generally used. These areas are designated based on the species of avian, avian behavior, and habitat present. Bird flight diverters are not utilized on every power line because there are many situations that birds can exist near power lines without significant risk of collisions (APLIC, 1994).
			O24-84
88	4.4-39	Mitigation Measure 4.4-8, last sentence ...3:1 mitigation ratio based on affected acreage and a 9:1 mitigation ratio based on impacted native oak trees.	What is the rationale for the 9:1 mitigation ratio? Tulare County does not have an established Oak Woodland Management Plan and generally utilizes the CEQA guidelines: 1:1 ratio for loss of acreage, and 2:1 ratio for replanting.
			O24-85
89	4.4-40	Mitigation Measure 4.4-9a, 1st sentence ...final design of transmission lines and access roads to ensure a minimum 50 foot construction buffer...	There is not a construction buffer associated with jurisdictional wetlands, usually they are species-specific.
			O24-86

Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
90	4.4-40	Mitigation Measure 4.4-9b ...to offset temporary and permanent impacts that occur as a result to the project, restoration and compensation mitigation...	Temporary impacts generally require a lower mitigation ratio than permanent impacts. The 1st bullet for this mitigation measure only mentions one mitigation ratio to cover both temporary and permanent impacts.
91	4.4-42	Mitigation Measure 4.4-10, 5th bullet Replace lost valley oaks or landmark trees at a 5:1 ratio within the City of Visalia...	Suggest changing the mitigation measure to SCE acquiring an oak tree or landmark tree removal permit from the City of Visalia.
92	4.4-46	Mitigation Measure 4.4-Alt2-1 ...in all suitable habitat for which SCE chooses not to perform protocol-level surveys.	<p>The US Fish and Wildlife Service and California Department of Fish and Game have not been allowing applicants to assume presence, and have instead been requiring protocol level surveys for these species prior to consultation. The protocol level surveys for these particular species would take approximately 2 to 2-1/2 years.</p> <p>Assuming the US Army Corps of Engineers would take jurisdiction over the waterway within which the species are present and a federal nexus could be determined, going through Section 7 of the federal Endangered Species Act would take an additional 1 to 2 years.</p> <p>If a federal nexus could not be determined, consultation would occur through Section 10 of the federal Endangered Species Act, and would add an additional 5 to 10 years to time needed to acquire a permit.</p> <p>Alternative 2 has approximately 4 miles of areas with the potential for vernal pools and vernal pool species. The Proposed Project has none.</p> <p>Alternative 2 would add significant time delays and cost to construction of the project that would not be applicable to the Proposed Project.</p>

Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
93	4.4-49	Top of page ...reconnaissance-level field surveys.	ESA and SCE conducted joint focused plant surveys for sensitive portions of the Proposed Project and Alternatives 2, 3, and 6 during Spring 2009. One sensitive plant, spiny seeped button cecely, was observed on Alternatives 2 and 6.
94	4.4-52	Mitigation Measure 4.4-Alt3-1 ...in all suitable habitat for which SCE chooses not to perform protocol-level surveys.	<p>SCE would need to obtain rights-of-entry from each property owner to secure access to conduct surveys. If there are unwilling property owners, SCE would need to obtain a court order to secure such temporary access, which could take approximately 2-3 months for each property owner.</p> <p>The US Fish and Wildlife Service and California Department of Fish and Game have not been allowing applicants to assume presence, and have instead been requiring protocol level surveys for these species prior to consultation. The protocol level surveys for these particular species would take approximately 2 to 2-1/2 years.</p> <p>Assuming the US Army Corps of Engineers would take jurisdiction over the waterway within which the species are present and a federal nexus could be determined, going through Section 7 of the federal Endangered Species Act would take an additional 1 to 2 years.</p> <p>If a federal nexus could not be determined, consultation would occur through Section 10 of the federal Endangered Species Act, and would add an additional 5 to 10 years to time needed to acquire a permit.</p> <p>Alternative 3 has approximately 6 miles of areas with the potential for vernal pools and vernal pool species. The Proposed Project has none.</p> <p>Alternative 3 would add significant time delays and cost to construction of the project that would not be applicable to the Proposed Project.</p>

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment	
95	4.4-58	Mitigation Measure 4.4-Alt6-1 ...in all suitable habitat for which SCE chooses not to perform protocol-level surveys.	Same as Comment #93 below, but Alternative 6 would cross approximately 3 miles of areas with the potential for vernal pools and vernal pool species. The Proposed Project has none.	O24-92
96	4.4-61	References – Biological Resources	The 1994 Avian Power Line Interaction Committee (APLIC) manual is the most updated manual that deals with avian collisions; and therefore, should be referenced here.	O24-93
97	4.5-5	Paleontological Setting, 2nd paragraph ...Mesozoic basic intrusive, and pre- Pre Cenozoic granitic...	Delete double "pre-".	O24-94

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment	
98	4.5-12	Native American Contact Contact was made with the [Native American Heritage Commission] NAHC in November 2005 and April 2007	Three separate requests for Sacred Lands Files searches were transmitted to the NAHC regarding the SJXVL Project on late October 2005, 4 April 2007, and 2 January 2008. These requests were associated with first the original proposed project area and sub-alternates, and subsequently as new increasingly northerly routes were added. The NAHC responded to the October 2005 request by letter dated 8 November 2005 stating that no sacred lands known to the NAHC were present in the immediate project area. The 4 April 2007 inquiry response was received on 23 April 2007; again the NAHC response was that no known sacred lands were present in the immediate area of the revised project. Finally, the NAHC responded by fax on 3 January 2008 that "numerous Native American cultural resources were present in the project area." NAHC staff in a 3 January telephone conversation stated that there were known to be numerous burials in the hills near the projects area and that there may be the remains of an unnamed village site in the general area, but indicated that members of the local Native American community listed in the 3 January fax would have to be contacted for further information. Although uncertain, the conclusion one draws from the sequence of responses from the NAHC is that Native American resources recorded in the Sacred Lands File were not threatened by the project until the last (Alternative 3) route was added to the search request. Subsequent conversations with representatives of the Santa Rosa Rancheria Tachi Tribe, the Eshow Valley Band of Michahai and Wuksachi Indians, and several local Native Americans of Wuksachi decent indicated a general interest in prehistoric and historic Native American resources throughout the region. Few specifics were given by these individuals with the exception of a profound concern about Rocky Hill by the representative of the Eshow Valley Band of Michahai and Wuksachi Indians.	O24-95

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
99	4.5-12	Other Sources of Information In a letter to the CPUC dated May 2008, Mary Gordon noted...	Mary Gordon's Protest and Request for a Hearing letter submitted to the CPUC on 30 May 2008 demonstrates extensive knowledge of the history of the Visalia area and the resource values associated with the area of the Proposed Project. Her admitted knowledge of the areas of Alternatives 2 and 3 is much less, and although she states that "it is impossible to adequately assess the potential for impacts to cultural resources on any of the three proposed routes because none of the areas has been systematically surveyed" she goes on to assert that "current information indicates that the greatest impacts to prehistoric and historic cultural resources occur along Alternative 1 [the Proposed Project]." (continued on following page)

O24-96

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
100 (cont'd)	4.5-12	(continued from previous page) Other Sources of Information In a letter to the CPUC dated May 2008, Mary Gordon noted...	(Continued from previous page) We do not believe the facts support this conclusion. Ms. Gordon goes on to say: "I agree that twelve prehistoric sites are on proposed Route 3. However, I believe, that the majority of the sites are small habitation sites." She also says Route 3 appears to be the most extensively surveyed. She acknowledges the numerous documented prehistoric archaeological sites along Alternative 2, including ethnographically named places and several large habitation sites, but then goes on to state that Alternative 2 is the least known archaeologically. As reported by Armstrong and Jackson (2008:Figure 4-1), the Alternative 2 route has in fact been subject to more systematic pedestrian archaeological survey than either Alternative 3 or the Proposed Project (due to landowner permission issues). Aerial reconnaissance of the Stone Corral Canyon area of the Alternative 3 route revealed several extensive previously unrecorded millingstone features indicative of very large habitation sites on properties for which SCE was denied landowner survey permission. This result serves to reinforce the expectation that in the present context (i.e., historic agricultural landuse in the valley) the foothill and foothill/valley interface areas are likely to be the most sensitive areas with regard to prehistoric archaeological resources in the project area. Alternative 3 crosses more of this potentially sensitive area than any of the other routes, followed by Alternative 2. The Proposed Project crosses by far the least amount of the foothill/mountain interface zone. Although we believe Ms. Gordon is sincere in her view that the Proposed Project is more sensitive than Alternative 2 and 3 with regard to cultural resources, it would appear that this view results from her greater familiarity with resources in the area of the Proposed Project and perhaps a desire to support her community.

O24-96
cont.

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment	
101	4.5-13	Archeological Survey, 3rd paragraph ...the majority of the alignment for the Proposed Project and Alternative 2 could not be surveyed...	Approximately two-thirds of Alternative 2 was subject to pedestrian archaeological survey, including all of the eastern portion of the alignment shared with Alternative 6 (Armstrong and Jackson 2008:Figure 4-1). This figure shows that a 300 foot wide corridor was surveyed within the existing Big Creek-Rector transmission line right-of-way and a 200 foot wide corridor was surveyed from the Kern Canal east to Millwood Road and from just east of the Visalia Electric RR grade to the eastern terminus of the Alternative 2 route.	O24-97
102	4.5-16	Top of page No archeological survey has yet been conducted for Alternative 6.	The portion of Alternative 6 that is shared with Alternative 2 has been archeologically surveyed at a 200 foot wide corridor width (Armstrong and Jackson 2008:Figure 4-1).	O24-98
103	4.5-19	Impact 4.5-1, 2nd paragraph ...Section 151246.4(b)(2).	The citation is probably 15064.5[4](b).	O24-99
104	4.6-3	The igneous granitic and basic rocks are relatively resistant [to erosion?]...	All things being equal, basic rock is significantly less resistant to erosion than granitic rock.	O24-100
105	4.6-5	Landslides	Due to the presence the possible landslide scarps along the ridgeline of the upper weathered portion of basic and granitic rock on Stokes Mountain, it is reasonable to conclude that the rock has the potential for moderate to high rates of erosion, including landslide.	O24-101
106	4.7-4	Schools There are two schools within one-quarter mile of the Proposed Project and there are no schools in the vicinity of the alternative alignments.	Union Elementary School is within one-quarter mile of Rector Substation, the starting point for all alignments.	O24-102

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment	
107	4.7-13	MM 4.7-1d SCE shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.	Submitting WEAP logs to the CPUC prior to construction isn't practical because workers come on site at different times. All workers are trained prior to working at the site, and the log is kept at the site.	O24-103
108	4.7-16	Mitigation Measure 4.7-3b ...and treatment/disposal of material found to exceed regulatory requirements...	The mitigation measure, as written, is overly burdensome. If there is a reason to suspect a property owner is using hazardous materials in a manner inconsistent with its labeled use and is jeopardizing public health, SCE would contact the Tulare County Health Department to conduct an investigation. However, SCE will test for typical soil contaminants during the geotechnical investigation, and if contamination is discovered above action levels set forth by the federal government (or the State of California, whichever is more stringent), SCE would notify the property owner as well as the Tulare County Health Department, and the Tulare County Health Department would coordinate oversight of the cleanup.	O24-104

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
109	4.7-16	<p>Mitigation Measure 4.7-3b.</p> <p>SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC prior to construction.</p>	<p>SCE would need to obtain rights-of-entry to conduct surveys. If there are unwilling property owners, SCE would need to obtain a court order to secure such temporary access, which could take approximately 2-3 months for each property owner.</p>

O24-105

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
110	4.7-18	<p>Mitigation Measure 4.7-6</p> <p>SCE shall consult with landowners to determine which aerial applicators cover agricultural parcels within one mile of the approved transmission line ROW. SCE shall provide written notification to all aerial applicators stating when the new transmission line and towers would be erected. SCE shall also provide all aerial applicators that operate in the area recent aerial photos or topographic maps clearly showing the location of the new lines and towers, as well as all existing SCE lines and towers within 10 miles of the approved corridor. The photos or maps shall also indicate the heights of the towers and conductors. SCE shall provide documentation of compliance to the CPUC.</p>	<p>This requirement is vague, overbroad, burdensome, and potentially impractical for SCE to implement in advance of commencement of construction. Depending on the CPUC's final route selection, there may be hundreds to over 1,000 property owners within 1 mile of each route. The requirement does not specify what "consult with landowners" means. While the property ownership list for new ROW was only 350 feet on either side of the proposed transmission line route, this measure would require "consulting with" property owners that are located 5,280 feet on either side of the transmission line, i.e., an area that is approximately 15 times as vast as the GO 131D 300 foot ownership list.</p>
111	4.7-18	<p>Mitigation Measure 4.7-6</p> <p>SCE shall also provide all aerial applicators that operate in the area recent aerial photos or topographic maps clearly showing the location of new lines, as well as existing SCE lines and towers within 10 miles of the approved corridor.</p>	<p>There is no practical reason to providing maps of existing lines within 10 miles of the approved corridor.</p>
112	4.7-23	<p>Mitigation Measure 4.7-11a</p> <p>As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, and pipelines, that are within and near the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.</p>	<p>The last sentence "The identification of objects..." should be removed. It is SCE's standard practice to ground any large metallic objects within the project ROW. For large metallic objects outside but near the ROW, SCE will investigate on a case by case basis.</p>

O24-106

O24-107

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
113	4.7-23	Mitigation Measure 4.7-11b Prior to construction, SCE shall coordinate with affected property owners to conduct an inventory of the groundwater wells that are within the proposed ROW. Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the minimum height of equipment that would be required to perform maintenance activities as well as the maximum line sag at the well locations, SCE shall identify wells that would not have the required minimum ground clearance to perform any necessary well maintenance and shall engage a qualified water well drilling contractor to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location. Abandonment of the old...	SCE would need to obtain rights-of-entry from each property owner to secure access to conduct surveys. If there are unwilling property owners, SCE would need to obtain a court order to secure such temporary access, which could take approximately 2-3 months for each property owner.
114	4.7-25	1st paragraph Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 2.	Please see Comment #106 below.
115	4.7-26	1st paragraph Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 3.	Please see Comment #106 below.
116	4.7-27	1st paragraph Unlike the Proposed Project, there are no schools within one-quarter mile of the alignment for Alternative 6.	Please see Comment #106 below.

O24-108

O24-109

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
117	4.7-27	Impact 4.7-ALT6-1 Additionally, a Notice of Proposed Construction or Alteration form (FAA Form 7460-1) would be filed with the FAA, as required.	Why is compliance with existing laws and the rules and regulations of outside agencies called out separately as mitigation under the Proposed Project, but merely part of the Project Description for Alternative 6?
118	4.8-17	MM 4.8-1: For all segments of new access roads that would be within 300 feet of an existing surface water channel (including irrigation ditches where no berm or levee is currently in place) and traverse a ground slope greater than two percent, the following protective measures shall be installed: Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side; Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet).	This appears to be an arbitrary mitigation measure that is an unreasonable and burdensome solution to an less than significant issue; there are numerous existing access roads that are within 300 feet of an existing surface water channel (including irrigation ditches where no berm or levee is currently in place) within the project area where no such protective measures are in place. All new SCE access and spur roads will be constructed per SCE specification E-2008-21.
119	4.8-17	Mitigation Measure 4.8-2 If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), SCE and/or its contractor shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with State hazardous waste disposal requirements.	If soil or groundwater contamination is discovered during construction, SCE or its contractor will stop work and call SCE's Regional Spill Response Coordinator to the site to make an assessment. The property owner would be notified as well as the Tulare County Health Department, and the Tulare County Health Department would coordinate oversight of the cleanup.
120	4.8-19	Alternative 2, 2nd paragraph ...SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.	Why is compliance with existing laws and the rules and regulations of outside agencies called out separately as mitigation under the Proposed Project, but merely part of the Project Description for Alternative 2?

O24-110

O24-111

O24-112

O24-113

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
121	4.8-19	Alternative 3, 2nd paragraph ...SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.	Why is compliance with existing laws and the rules and regulations of outside agencies called out separately as mitigation under the Proposed Project, but merely part of the Project Description for Alternative 3?
122	4.8-19	Alternative 6, 2nd paragraph ...SCE would be required to consult with and obtain an encroachment permit (or waiver) from the Central Valley Flood Protection Board.	Why is compliance with existing laws and the rules and regulations of outside agencies called out separately as mitigation under the Proposed Project, but merely part of the Project Description for Alternative 6?
123	4.9-1	Existing Land Uses, Proposed Project, 2nd paragraph ...on land currently used by SCE for industrial purposes.	The land is being used for utility purposes.
124	4.9-3 and 4.9-4	Last paragraph page 4.9-3 Land Use (1964): Environmental Resource Management (1972) 3rd paragraph page 4.9-4 (Tulare County, 2001)	Unclear about dates of documents used. Tulare County updated their General Plan in 2008.
125	4.10-12	Fresno County restricts construction hours to between the hours of six p.m. and nine p.m. on weekdays and between the hours of seven a.m. and five p.m. on Saturdays and Sundays.	Six p.m should be six a.m.

O24-113
cont.

O24-114

O24-115

O24-116

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
126	4.10-14	Mitigation Measure 4.10-1, Top of page ...and these shall be submitted to the City.	SCE has not conducted field investigations to determine whether subsurface blasting will be necessary at any particular proposed tower or pole foundation locations. Depending on subsurface conditions, SCE may use blasting for installation of foundations in areas of shallow bedrock, but such use would take place far outside of the Cities of Visalia and Farmersville. SCE questions whether the CPUC has any jurisdictional authority or expertise to "review and approve" blasting plans, and if not, what is the purpose of such approval? Absent such CPUC authority and expertise, this measure should be re-drafted to require that if SCE determines that blasting is required for any one or more construction activities, SCE shall provide the CPUC copies of such blasting plan in advance of any such activity.
127	4.10-17	Mitigation Measure 4.10-4a, Temporary Construction Noise Nearby residents shall be notified for the construction schedule and how many days they may be affected by construction noise prior to the commencement of construction activities.	SCE's construction noise is no different than any other construction noise taking place within Tulare County and the cities of Visalia and Farmersville. In order to minimize the effects of construction noise on nearby receptors, each of these jurisdictions have designated hours during which construction may take place. If construction must take place outside of these hours, there are processes in place for obtaining a variance. In addition, a majority of the region is used for agricultural operations, which are similarly noisy, and are not restricted by noise ordinance.
128	4.10-18	Mitigation Measure 4.10-5 Blasting activities could expose people to substantial noise levels	SCE has not conducted field investigations to determine whether subsurface blasting will be necessary, if at all, at any particular tower or pole foundation location. If determined to be needed, such blasting would occur below ground.

O24-117

O24-118

O24-119

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
129	4.10-20	Alternative 2	<p>The discussion of noise impacts during construction of Alternative 2 is misleading.</p> <p>As stated in Section 4.1, Aesthetics, approximately 216 residences are within 300 feet of Alternative 2 as compared to approximately 86 residences within 300 feet of the Proposed Project. This is an increase of approximately 150 percent.</p> <p>Nighttime construction is not anticipated for the Proposed Project; however, the chances for nighttime construction are greatly increased for Alternative 2 due to the outage constraints for construction within the existing corridor. This would result in approximately 3x the additional notifications.</p>
130	4.10-21	Alternative 3	<p>The discussion of noise impacts during construction of Alternative 3 is misleading.</p> <p>As stated in Section 4.1, Aesthetics, approximately 214 residences are within 300 feet of Alternative 3 as compared to approximately 86 residences within 300 of the Proposed Project. This is a difference of approximately 150 percent.</p> <p>Nighttime construction is not anticipated for the Proposed Project; however, the chances for nighttime construction are almost certain for Alternative 3 due to the outage constraints for construction within the existing corridor. This would result in approximately 3x the additional notifications.</p>

O24-120

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
131	4.10-21	Alternative 6	<p>The discussion of noise impacts during construction of Alternative 6 is misleading.</p> <p>As stated in Section 4.1, Aesthetics, approximately 213 residences are within 300 feet of Alternative 6 as compared to approximately 86 residences within 300 of the Proposed Project. This is an increase of approximately 150 percent.</p> <p>Nighttime construction is not anticipated for the Proposed Project; however, the chances for nighttime construction are greatly increased for Alternative 6 due to the outage constraints for construction within the existing corridor. This would result in 3x the additional notifications.</p>
132	4.11-7 and 4.11-8	Alternative 6 Moreover, Alternative 6 would avoid displacing any housing units or people, including the one residential housing unit located adjacent to Proposed Project...	In fact, Alternative 6 as designed by the CPUC, would require the removal of one residence.
133	4.13-2	1st paragraph Located approximately one-half mile north of the Proposed Project, Kaweah Oaks Preserve in the City of Exeter...	The Kaweah Oaks Preserve is in unincorporated Tulare County.
134	4.14-7	Mitigation Measure 4.14-1a SCE shall also coordinate short-term construction activities at private road crossings with the applicable private property owners. Copies of all encroachment permits and evidence of private property coordination shall be provided to the CPUC prior to the commencement of construction activities.	<p>SCE can provide Caltrans Encroachment Agreements and agreements with fee owners of lands with private roads.</p> <p>To be clear, SCE will not be entering into agreements with private parties who only have access easements to use these private roads crossing of lands owned by the fee owner.</p>

O24-120 cont.

O24-121

O24-122

O24-123

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
135	5-3	Proposed Project, second item Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive.	Height restrictions in the ROW do not convert Farmland to non-agricultural use. People have been farming under the Big Creek transmission lines for almost 100 years.
136	5-4	Proposed Project, Alternative 2, Alternative 3, and Alternative 6 Less than significant impacts would include permanently removing ## acres of Farmland that supports walnut orchards from production.	This is not a CEQA criterion.
137	5-7	Agricultural Resources All three alternatives would remove approximately one-half the acreage of walnut orchards that would be removed from production under the Proposed Project.	This is not a CEQA criterion for significance. Additionally, as shown in the EIR, Alternatives 2, 3, and 6 would require the removal of approximately 1.1 acres of walnut orchards, and the Proposed Project would require the removal of 4.6 acres of walnut orchards. Considering that the magnitude of the acreage is so low, and this is not a CEQA criterion, it should not be used as a basis for making a route decision or the selection of an environmentally superior alternative.
138	6-2	Significant Environmental Effects that Cannot be Avoided ...conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive...	Please see Comment #3 below.

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
139	6-2	Significant Environmental Effects that Cannot be Avoided The Proposed Project would result in: permanent removal of 31.1 acres of Farmland...	Why were project alternatives pursued to reduce the unmitigable impacts to the Big Creek Hydroelectric System Historic District, but not for Farmland? The structures could be made taller to increase the spans, requiring fewer structures, and a fewer number of acres of Farmland would be impacted.
140	6-3	Significant Irreversible Changes, 1st paragraph ...construction of the Proposed Project would necessitate the permanent removal of 31.1 acres of Farmland and conversion of an additional 29 acres of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.	Please see Comment #3 below.
141	6-5 and 6-6	Construction of the Proposed Project could result in both temporary impacts on special-status species (i.e., Kaweah brodiaea, Hoover's spurge, striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuctoria, recurved larkspur, spiny-sealed button celery, valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk, and golden eagle)...	Only Hoovers Spurge, San Joaquin Adobe Sunburst, Kaweah Brodiaea, Valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk, and golden eagle have the potential to be present for the Proposed Project. Valley elderberry suitable for supporting the Valley elderberry longhorn beetle has been observed on the Proposed Project in limited locations. The other species listed in the text have been observed or have the potential to be present on Alternatives 2, 3, and 6.
142	6-6	2nd paragraph ...within the City of Visalia contains valley oak and/or protected landmark trees.	The existing Big Creek-Rector Corridor may contain valley oak and/or landmark trees.
143	B-1	1st paragraph Units of measure are Gauss (G) or milliGauss (mG, 1 1,000th of a Gauss).	Revise to: Units of measure are Gauss (G) or milliGauss (mG, one 1,000th of a Gauss).

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
144	B-6	last numerical list 4. Total cost of mitigation measures should not exceed 4 percent of the total cost of the Project.	EMF is not a CEQA issues because impacts from EMF exposures have not been established. Therefore, impacts cannot be "mitigated". A more appropriate term would be "field reduction measures" rather than "mitigation measures". Additionally, the CPUC's 4 percent cost guidelines is not an absolute cap if circumstances are unusual. Revise to: 4. Total cost of field reduction measures should not exceed about 4 percent of the total cost of the Project.
145	B-7	1st numerical item 5. Mitigation measures should have a noticeable reduction in the magnetic field level approximately 15 percent or more.	Revise to: 5. Field reduction measures should have a noticeable reduction in the calculated magnetic field level at the edge(s) of right-of-way approximately 15 percent or more.

O24-133

O24-134

Southern California Edison Company
 Comments to San Joaquin Cross Valley Loop EIR
 July 31, 2009

Comment Letter O24

Number	Page	Text reference	Comment
146	B-2 to B-3	Section on Exemption Criteria starting with the last paragraph on B-2 beginning with "Utilities may use the following guidelines to determine those specific types of projects..." And continuing through "The Second type projects are those located in undeveloped areas"	The exemption discussion is not consistent with the EMF Design Guidelines Guidelines for Electrical Facilities developed by investor owned utilities in response to CPUC Decision 06-01-042 and filed with the CPUC. The discussion of exemptions should be replaced by the following text: The following criteria to determine those transmission and substation projects exempted from the requirement for consideration of no-cost and low-cost magnetic field reduction measures: 1. Emergency - All work required to restore service or remove an unsafe condition. 2. Operation & Maintenance - Washing and switching operations, Replacing cross-arms, insulators, or line hardware, Replacing deteriorated poles, Maintaining underground cable and vaults, Replacing line and substation equipment with equipment serving the same purpose and with similar ratings, Repairing line and substation equipment. 3. Relocations: - Line relocation of up to 2000 feet, Installation of guy poles or trenching poles only. 4. Minor Improvements - Addition of safety devices, Reconductoring up to 2000 feet, where changing pole-head configuration is not required, Installation of overhead switches Insulator replacement, Modification of protective equipment and monitoring equipment., Intersetting of additional structures between existing support structures. 5. Projects located exclusively adjacent to undeveloped land—including land under the jurisdiction of the National Park Service, the State Department of Parks and Recreation, U.S. Forest Service, or Bureau of Land Management (BLM).

O24-135

**Southern California Edison Company
Comments to San Joaquin Cross Valley Loop EIR
July 31, 2009**

Comment Letter O24

Number	Page	Text reference	Comment
147	B-3 and B-4	The section on EMF Reduction: All references to "Mitigation Measures".	EMF is not a CEQA issues because impacts from EMF exposures have not been established. Therefore, impacts cannot be "mitigated". A more appropriate term would be "field reduction measures" rather than "mitigation measures". All references to "mitigation measures" should be revised to "Field reduction measures".
148	8-7	General Reporting Procedures " . . . SCE shall provide the CPUC with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable."	Requiring SCE to prepare quarterly reports is inconsistent with past CPUC requirements. As has been the case on several other SCE transmission projects approved by the CPUC, the CPUC and its designated mitigation monitor would typically be involved in the review of each mitigation measure to ensure compliance. It has been the CPUC who has issued reports to SCE documenting performance during the construction period (Viejo). In addition, the requirement that quarterly reports be submitted "as long as mitigation measures are applicable" is excessive, particularly for this mitigation measures that are proposed to extend in to perpetuity. Thus SCE requests this requirement be deleted.

O24-136

O24-137

SHUTE, MIHALY & WEINBERGER LLP
ATTORNEYS AT LAW

Comment Letter O25

E. CLEMENT SHUTE, JR. *
MARK I. WEINBERGER (1946-2005)
FRAN M. LAYTON
RACHEL B. HOOPER
ELLEN J. GARBER
TAMARA S. GALANTER
ANDREW W. SCHWARTZ
ELLISON FOLK
RICHARD S. TAYLOR
WILLIAM J. WHITE
ROBERT S. PERLMUTTER
OSA L. WOLFF
MATHEW D. ZINN
CATHERINE C. ENGBERG
AMY J. BRICKER
GABRIEL M.B. ROSS
DEBORAH L. KEETH
WINTER KING
KEVIN P. BURDY
*SENIOR COUNSEL

396 HAYES STREET
SAN FRANCISCO, CALIFORNIA 94102
TELEPHONE: (415) 552-7272
FACSIMILE: (415) 552-5816
WWW.SMVLAW.COM

AMANDA R. GARCIA
JEANNETTE M. MACMILLAN
ISAAC N. BOWERS
HEATHER M. MINNER
ERIN B. CHALMERS
KRISTIN B. BURFORD

LAUREL L. IMPETT, AICP
CARMEN J. BORO, AICP
URBAN PLANNERS

FRAN M. LAYTON
LAYTON@SMVLAW.COM

July 31, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
Fax: (415) 896-0332
E-mail: sjxvl@esassoc.com

Re: Draft Environmental Impact Report for the San Joaquin Cross Valley Loop Transmission Project

Dear Mr. Uchida:

This firm represents the City of Visalia ("City") on the application of Southern California Edison ("SCE") to construct and operate the San Joaquin Cross Valley Transmission Loop Project ("Project"). This Project would traverse land within the Visalia city limits as well as within Visalia's adopted Urban Development Boundary and Urban Area Boundary. The City understands and appreciates the need for the proposed Project. However, it is concerned about the far-ranging environmental impacts which may accompany the Project, regardless of the particular Project alignment.

After carefully reviewing the draft Environmental Impact Report ("DEIR") for the proposed Project, we have found that it fails to comply with the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 *et seq.*, and the CEQA Guidelines, California Code of Regulations, title 14, § 15000 *et seq.* ("CEQA Guidelines"). Although the proposed Project would traverse land within Visalia

Mr. Jensen Uchida
July 31, 2009
Page 2

-- and indeed sections of the proposed alignments would pass within 50 feet of existing residential neighborhoods --, the DEIR fails to adequately address or mitigate the numerous significant impacts upon the City. The Project would irreparably alter views in the area, including views of the majestic Sierra Nevada Mountain Range, yet the DEIR incorrectly concludes these impacts would not be significant in many areas of the various Project alignments and would be mitigated to a less than significant level in all other areas. The increase in noise levels, from construction of the Project and from the high-voltage lines' corona discharge, would be a source of aggravation and annoyance, yet the DEIR fails to provide specific and enforceable mitigation for these impacts. The DEIR defers entirely an evaluation of the Project's compatibility with Visalia's planned development, including important roadway and community amenity projects long contemplated by the City. In addition, the DEIR fails to adequately analyze impacts related to the loss of Project-specific and cumulative Prime Farmland, Farmlands of Statewide Importance, and Farmlands of Local Importance. The DEIR also fails at the essential task of analyzing alternatives to the Project.

An EIR is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California*, 47 Cal. 3d 376, 392 (1988) (citations omitted). It "is an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' Because the EIR must be certified or rejected by public officials, it is a document of accountability." *Id.* (citations omitted). Where, as here, the environmental review document fails to fully and accurately inform decision-makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of the statute. See Pub. Res. Code § 21061.

As a result of the DEIR's numerous and serious inadequacies, there can be no meaningful public review of the Project. The California Public Utilities Commission ("CPUC") must revise and recirculate the DEIR in order to permit an adequate understanding of the environmental issues at stake.

I. The DEIR Fails to Adequately Analyze the Project's Land Use Impacts.

The proposed Project (also referred to as "Alternative Route 1") and each of the Alternative alignments would traverse land within the existing Visalia city limit and land within the City's Urban Development Boundary ("UDB"). The Project therefore has the potential to impact the City's well established existing community as well as land proposed for development. Although the DEIR purports to undertake a land use

Mr. Jensen Uchida
July 31, 2009
Page 3

consistency analysis, its "analysis" is cursory and uninformative and therefore the Project's land use impacts on the City of Visalia remain largely unanalyzed.

A. The DEIR Fails to Adequately Analyze Impacts Relating to the Project's Compatibility With the Visalia Community.

1. The DEIR Lacks Detailed Information Regarding Potentially Affected Parcels.

As a preliminary matter, the DEIR does not specifically identify the parcels of land that would be impacted by the proposed Project alignment or any of the Alternative alignments within either the existing City limits or within the UDB. An adequate analysis of the Project's impacts on Visalia must necessarily begin with this rudimentary information. The revised DEIR must identify those parcels that would be impacted by the proposed Project and each Alternative alignment and analyze the specific effect on these parcels. This document should, therefore, provide the following information for Alternative Route 1 and each of the Alternative routes: 1) an identification of those parcels within the existing right of way ("ROW"); 2) a description of the current uses on each of those parcels; 3) a description of proposed uses on those parcels following construction of the proposed Project; and 4) an identification of those parcels that may be precluded from development as a result of the proposed Project and each Alternative alignment.

The revised DEIR must also include information about the property rights that SCE will acquire under the proposed Project and each Alternative alignment. The City understands that SCE has indicated that it seeks to revise the terms of its existing ROW, whether the PUC approves the proposed Project or one of the Alternative alignments. Currently, SCE owns an easement over the existing ROW and the fee owner retains significant rights to use the underlying property. The additional rights in the existing ROW that SCE has said it may require for the Project are not necessarily additional land, but rather either fee ownership or expanded easement rights that would limit the underlying property owner's use of its land within the ROW. The alteration of the property rights in the existing ROW as between SCE and the fee owner has foreseeable impacts, including the potential disuse or non-maintenance of the underlying land, ultimately leading to blight. In order to evaluate these environmental impacts, the revised DEIR must first identify any potential change in the nature of property rights for the proposed Project and each of the Alternative alignments.

O25-1

O25-2

2. The DEIR Fails to Adequately Analyze Impacts from the Alignment of Alternative Route 1.

Development of Alternative Route 1 would impact Visalia’s existing community as well as proposed development within the City’s ultimate planning boundary. Specifically, the Project would affect about one mile of existing ROW within the City, and an additional two miles that are within the City’s UDB. Although SCE currently has a transmission line corridor that runs along the edge of the City’s eastern boundary, the proposed Project would nonetheless result in impacts to a well established community. See Letter from Mayor Gamboa, City of Visalia, to Mr. Jensen Uchida, September 22, 2008, attached as Exhibit A to this letter for a discussion of the number of existing and proposed residents that would be impacted by the proposed Project and Exhibit B, Southern California Edison Proposed Routes.

As discussed below in Section II of this letter (Visual Impacts), the increase in the height of the poles and the additional lines that are features of all of the potential transmission routes would result in unsightly views of the towers, lines and the blighted wasteland that typically can occur within a transmission line corridor. The poles and lines, which would be more than twice as tall as the existing SCE structures, would stand well above the tree-line and thus interfere with views of the Sierra Nevada Mountain Range. In addition, the increase in the number of lines will also increase residents’ fear or apprehension of electro-magnetic fields (“EMF”). While the scientific community may remain divided as to the potential risks associated with EMF exposure, the public nonetheless is apprehensive about the potential health risks that EMF pose. Additional transmission lines would also bring an increased risk of downed power lines which in turn poses an increased risk of wildfires in an area already prone to wildfires. The potential hazards associated with living next to or near power lines thus would affect residents’ use and enjoyment of their homes. Given the proximity of the existing community to this Project, the DEIR’s land use analysis should have carefully examined these effects. Yet, the document never so much as mentions Visalia in its “analysis” of the Project’s potential to physically divide an established community. See DEIR at 4.9-14.

The alignment of Alternative Route 1 would also thwart Visalia’s well established plans to build out the City. Visalia’s UDB extends east of the current City boundaries. Over the next ten years or so, the City expects its population to grow from 123,000 to about 165,000. While some of this development would be infill, much of this growth is expected to occur within the UDB. The City’s plans in this location will support mixed use neighborhoods, including single and multi family homes, schools, parks, shopping and other land uses. See Exhibit A. Exhibit B (Southern California Edison Proposed Routes) shows an aerial view of the City and the City’s UDB line (in

O25-3

brown). At present, urban development within the City is located predominantly west of the current SCE ROW. Once the City is fully built out, however, urban development would extend an additional one-half mile to the east of the SCE ROW. Consequently, the Project’s towers and lines would create a significant obstacle to Visalia’s planned expansion of the City since they would appear as a stark industrial swath through Visalia’s urban core. The DEIR fails entirely to address this impact.

The transmission lines – and the blighted landscape that can occur under the lines -- would therefore have a pervasive influence on the emerging community. Rather than develop near the transmission lines, developers would likely seek other locations for development. As a result, the land near transmission lines – or even within sight of the transmission lines -- may be left undeveloped. Thus, rather than build out in a concentric and contiguous manner as the Visalia General Plan clearly promotes, the City would be left with islands of undeveloped land. This leap-frog pattern of development results in all sorts of other problems including the inability to provide efficient public utilities and services and incomplete or sporadic public amenities (such as gaps in sidewalks and gutters). Or, rather than develop these lands with residential uses as the City may be intending, parcels along the transmission line corridor may be developed with less desirable uses.

3. The DEIR Fails to Adequately Analyze Impacts From Alternative Routes 2, 3 and 6.

Although each of the Alternative routes would affect about four miles of existing ROW along the eastern edge of the City, the DEIR also fails to examine how such an alignment would impact Visalia’s established community. Rather than provide an analysis of land use compatibility impacts, the DEIR simply asserts that “the Project would traverse *Park and Conservation* land use designations.” DEIR at 4.9-19, 20 and 21. The DEIR never explains the implications of this potential land use conflict. Nor, more importantly, does the DEIR identify, let alone analyze, the specific impacts on the residential neighborhoods which abut the west side of the existing transmission corridor. As with the proposed Project alignment, Alternative routes 2, 3 and 6 would physically divide the community upon build out of the City (see discussion above).

Alternative routes 2, 3 and 6 would also interfere with several important projects contemplated for development within the City. The City is planning to develop a regional sports park on a City-owned 100-acre parcel, located between the existing SCE transmission lines and Avenue 152, just north of Mineral King Avenue. (The location of this park is shown on the City of Visalia Trail Linkages Plan, attached as Exhibit C). While this proposed park site is currently adjacent to SCE’s existing transmission lines, the increased intensity of use, and in particular the visible increase in industrial character

O25-3
cont.

O25-4

Mr. Jensen Uchida
July 31, 2009
Page 6

of this location, would complicate the development of this sports park and potentially interfere with the community's use and enjoyment of the park.

In addition, the City is proposing the construction of a major arterial along the existing SCE ROW (Alternative routes 2, 3 and 6). This arterial – referred to as the Visalia Parkway -- would be constructed immediately east of, and parallel to, the existing SCE right of way until it crosses the right of way just south of St. Johns Parkway and then continues northward on the west side of, and parallel to, the right of way until it reaches St. Johns River. See Proposed Visalia Parkway, attached as Exhibit D. This roadway would be a four-lane arterial with a grade separated interchange with Highway 198. The proximity of this major roadway project to the SCE ROW unquestionably would complicate the construction, design and operation of the Parkway's intersections with Highway 198, Walnut Avenue, Tulare Avenue, Noble Avenue, Mineral King Avenue and Houston Avenue. The revised DEIR must analyze how the construction of new towers and lines would impact the City's proposed construction of this major roadway.

Finally, the City is continuing to build out its city-wide 86-mile recreational trail system that will improve access to important community facilities and services for Visalia residents. This trail system (shown on Exhibit C, City of Visalia Trail Linkages Plan) is an effort to establish a system of trails along Visalia's waterway corridors. To this end, several policies in the Community Waterways section of the Conservation, Open Space, Recreation and Parks Element ("CORP") of the City's General Plan promote trails and bike paths along the City's waterways. Moreover, policy commitments in the CORP call for restoring, enhancing and maintaining the natural, scenic, historic, and open space quality of the City's creek corridors and open spaces.

The St. Johns River and Mill Creek are two important waterways that currently have paths within riparian setback areas; the St. Johns River path currently traverses the existing SCE ROW, and the Mill Creek path is scheduled to also cross the ROW in the future. Both paths would be adversely impacted by Alternative alignments 2, 3 and 6. Far from enhancing the scenic and open space qualities of these waterway corridors, the increased height of the proposed Project's poles, coupled with the industrial nature of the new lines, would be contrary to the City's goals for these spaces. See Exhibit N (photos of existing transmission lines and mountains from St. Johns River trail; taller towers and lines would obscure the mountain views). Moreover, these paths have become an important amenity for Visalia residents, not only because they provide connections within the City but also because they provide critical access to nature in an otherwise urban environment. The proposed Project would therefore interfere with the residents' use and enjoyment of the interconnected system of waterway paths.

O25-4
cont.

O25-5

Mr. Jensen Uchida
July 31, 2009
Page 7

B. The DEIR Fails to Adequately Address the Project's Inconsistency With the Visalia General Plan.

In addition to the Project's clear inconsistency with the City's goals relating to the enhancement and restoration of the City's waterway corridors, the Project is also inconsistent with numerous other objectives and goals established by the City's General Plan. Although the DEIR does list some Visalia General Plan policies with which the Project might conflict, it ignores other objectives, goals and policies that are highly relevant, including:

- Objective, which calls for maintaining and enhancing Visalia's physical diversity, visual qualities and small-town characteristics. Land Use Element at 1-18, 3-2. The construction of tall transmission poles and lines clearly does not maintain or enhance Visalia's visual qualities or small-town characteristics. The DEIR must discuss this inconsistency.
- Policy 1.1.16, which calls for minimizing the visual impact of development through various design techniques such as building orientation, landscaping depth and density. Land Use Element at 3-5. (See also Policy 4.1.6, which calls for the development of design measures to buffer residential development from non-residential land uses. These measures should, at a minimum, include setbacks, and landscaping. Land Use Element at 3-27). The DEIR fails to consider landscaping to minimize the visual effects of the Project's features.
- Implementing Policy 3.3-1, which is to encourage cooperative agreements with the City and SCE to explore recreation and open space facilities. CORP at 64. This policy specifically names SCE as a potential partner in developing open space, yet the DEIR fails to mention this policy or propose any joint use of the ROW for recreation or open space purposes.
- Objective, calling for the City to maximize opportunity for joint use of public land and facilities such as schools, stormwater ponding basins and other recreation areas under public jurisdiction suitable for recreation. CORP at 6. Although the DEIR does not identify this objective or discuss the implications for the proposed Project, as discussed below, opportunities exist for joint use of the SCE ROW corridor to mitigate many of the Project's environmental impacts.
- Objective, calling for the utilization of ordinances, easements, restrictive covenants and other tools to negotiate with landowners and developers to

O25-6

Mr. Jensen Uchida
July 31, 2009
Page 8

ensure that significant natural resources and open space are protected during development. CORP at 6.

O25-6
cont.

In other instances, the DEIR lists goals and policies set forth in Visalia's General Plan, yet stops short of actually analyzing the inconsistencies between the Plan's provisions and the Project. For example, the DEIR lists, but does not analyze the implications of, the following highly relevant policies:

- Implementing Policy 1.1.4: Work with utilities and transportation companies to landscape power line and railroad right-of-ways throughout the community and to underground utilities and abandoned railroad spurs where possible.
- Implementing Policy 1.1.5: Develop land use and site design measures for areas adjacent to high-voltage power facilities.
- Implementing Policy 4.1.16: Require special site development standards for proposed non-residential or more intensive land uses adjacent to established residential areas to minimize negative impacts on abutting properties.

O25-7

CEQA's requirement to discuss plan inconsistencies is meant to inform the lead agency so that it may modify a project to avoid the inconsistencies. See *Orinda Ass'n v. Board of Supervisors*, 182 Cal. App. 3d 1145, 1169 (1986). Here, the DEIR's simple recitation of the policy without the required analysis fails to inform decision makers of opportunities to modify the Project, or apply mitigation, to reduce numerous environmental impacts.

C. The DEIR Fails to Identify Any Mitigation for The Project's Significant Land Use Impacts.

The extensive land use impacts described above, coupled with the Visalia General Plan provisions calling for the City and SCE to develop cooperative agreements to explore recreation and open space facilities, dictate that serious consideration be given to conjunctive use of the proposed transmission line ROW. As discussed more fully in Section II (Visual Impacts) of this letter, conjunctive use would help to make the proposed transmission line corridor more compatible with the existing community and proposed development. A linear right-of-way is an ideal configuration for a walking or bicycling trail. With appropriate landscaping and landscaped buffers, such a linear park or trail would offset the tendency for the transmission line corridor to become a wasteland with associated effects on the community's ambiance and character.

O25-8

Mr. Jensen Uchida
July 31, 2009
Page 9

Moreover, a trail along the SCE ROW would provide a critical link in the City's efforts to complete its city-wide trail system.

Finally, development of a linear park or pathway would further mitigate the Project's numerous land use impacts by helping to implement the following goals, objectives and policies set forth in the City's General Plan:

- Objective: Design parks and recreation facilities which will enhance community identity and which will serve the recreation and social needs of Visalians of all ages, economic situations and physical abilities. CORP at 6.
- Objective C: Provide park sites which respond to the needs of the City's diverse population, including ... trails and bikeways for pedestrians, joggers and bicyclists... CORP at 59.
- Goal: Create and preserve an open space system in the Visalia planning area to meet a variety of needs. *Id.* at 6.
- Objective: Create and preserve open space for outdoor recreation. *Id.*
- Objective: Create and maintain open space for public health and safety in areas which require special management or regulation. *Id.*
- Goal: Develop a high quality public park system which provides adequate space and facilities for varied recreational opportunities which are conveniently accessible to all Visalia residents. *Id.*
- Objective: Acquire adequate park sites for future City growth. *Id.*
- Objective: Utilize ordinances, easements, restrictive covenants and other tools to negotiate with landowners and developers to ensure that significant natural resources and open space are protected during development. *Id.*
- Policy: Maintain open space corridors and green belts between industrial and residential development in all areas of the City. *Id.* at 58.

O25-8
cont.

II. The DEIR Fails to Adequately Analyze Visual/Aesthetic Impacts.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of aesthetic, natural, scenic, and historic environmental qualities." Pub. Res. Code § 21001(b). Thus, courts have recognized that aesthetic issues "are properly studied in an EIR to assess the impacts of a

O25-9

Mr. Jensen Uchida
July 31, 2009
Page 10

project." *The Pocket Protectors v. City of Sacramento*, 124 Cal. App. 4th 903, 937 (2004).

Here, the DEIR's analysis of the proposed Project's impacts to visual resources is wholly inadequate. The DEIR fails to discuss the extent and severity of the impacts identified, fails to analyze impacts to certain user groups, and fails to require all feasible mitigation. In particular, the DEIR fails to analyze the proposed Project's severe aesthetic impacts on visual resources in and near the City of Visalia, especially in relation to views of the nearby Sierra Nevada mountains. Visalia's scenic qualities are well known, ranging from its rivers, to its views of the nearby foothills and the Sierra Nevada range. The City has a strong connection with these mountains and the Sequoia and Kings Canyon National Parks in particular. Visalia is known as the Gateway to the Sequoias, and the City recently started California's first Valley-to-Mountains National Park Shuttle. As evidenced by numerous goals and policies in the City's General Plan, City residents value Visalia's scenic vistas, rivers, parks and trails. See Sections I.B, I.C of these comments regarding the City's values, as evidenced in its General Plan. A revised DEIR must be prepared and recirculated to fully analyze the proposed Project's impacts on these important resources.

A. The DEIR Fails to Analyze All Aesthetic Impacts of the Project.

In those areas of the proposed Project where new transmission towers would replace existing ones, the DEIR fails to analyze the visual impacts caused by the proposed changes to the number and configuration of transmission lines. For the first 1.1 miles of the proposed Project and Alternative alignments, the Project would replace 60 foot transmission towers with 120-160 foot towers. DEIR at 2-6. Further, the Project would increase the number of transmission lines from six to twelve, and would change the current configuration of lines to create three separate sets of horizontal lines instead of just one set. *Id.*, Figures 2-4, 2-5. All of the Alternative alignments would also require these same changes for an additional 7 to 13.5 miles along SCE's existing ROW, where existing towers would be replaced with much taller towers that would carry twice as many lines. DEIR at 3-10 to 3-18. These changes would dramatically increase the visual impact and prominence of the transmission lines and towers.

Although the DEIR acknowledges that the new towers would be taller than existing ones, it fails to analyze the visual impacts caused by the reconfiguration and doubling of the number of lines. DEIR at 4.1-43, 44. Instead, the DEIR merely states that visual impacts due to increased tower height would be "less than significant as the proposed transmission line would result in an incremental visual effect which would not substantially alter the intrinsic character or composition of the existing view." DEIR at 4.1-44 (finding no significant visual impact in the first 1.1 mile portion of the proposed

O25-9
cont.

Mr. Jensen Uchida
July 31, 2009
Page 11

Project), 4.1-53 (finding no significant visual impact along most of the proposed Alternative 2 alignment within the existing ROW). It notes that the "replacement poles would extend further into the sky than the existing poles," and that the proposed new tubular poles, which would be spaced farther apart than existing poles, would be less visually obtrusive than the existing lattice towers. DEIR at 4.1-43, 44.

However, the DEIR ignores the fact that the Project would substantially increase the number and orientation of transmission lines. Despite the further distance between poles, the Project would result in twice the number of lines configured in three horizontal rows instead of one. These new lines, some of which would be more than twice as high as current lines, would contrast starkly with the sky and with views of the Sierra Nevadas. As described above, the views of the Sierras are treasured by Visalia residents, and any impact to these spectacular vistas is clearly significant. The new transmission lines and poles would be visible from a much greater distance and would obstruct a larger portion of a person's view when viewed from a near distance. The DEIR's failure to analyze these significant aesthetic impacts from the transmission lines themselves renders the DEIR's analysis insufficient.

The DEIR also fails to analyze the impact the taller transmission poles and increased number of lines would have due to the fact that they would rise significantly above the tree line. Currently, the existing SCE lines are approximately at tree height, so the lines are less noticeable because they do not stand out starkly against the skyline.¹ For a point of reference, Exhibit E shows the spectacular Sierra Nevada skyline from Visalia; the streetlight poles and utility lines in the foreground of the Akers Street photograph are approximately 25 and 35 feet tall, respectively. They do not stand out against the skyline due to the shielding by the trees. Likewise, the photograph from Road 144/Avenue 313 shows the existing lines and towers on SCE's ROW. See Exhibit E (four unlabeled photographs). The existing towers do not stand out against the skyline because they do not rise above treeline from a middleground viewing distance. However, the proposed new poles and lines would be approximately four times as tall as the utility lines in the Akers Street picture, and two or more times as tall as the existing poles in SCE's ROW. *Id.* Consequently, the new lines would tower above the trees, obstructing the views of the distant mountains. The trees would not be able to soften the effects of the tall lines, and the increased structure height would create an alarming increase in

¹ Note that Visalia is a Tree City, USA, and has been for 20 years; thus, it has a lot of trees. This designation is part of a tree planting and tree care program sponsored by The National Arbor Day Foundation.

O25-9
cont.

O25-10

Mr. Jensen Uchida
July 31, 2009
Page 12

industrial character juxtaposed against the beautiful Sierra Nevadas and the foothills.
The DEIR fails to analyze this impact.

B. The DEIR Fails to Analyze the Project’s Aesthetic Impacts on Certain User Groups and Underestimates its Impacts on Other User Groups.

The DEIR fails to analyze the Project’s visual impacts on individuals who would be exposed to views of the transmission lines from public parks and pathways, including the St. Johns River and Mill Creek bike paths and the existing city park in the River Run Ranch development in northern Visalia. See Exhibit F (River Run Ranch Development) (showing location of town park adjacent to, and underneath, ROW). Instead, the DEIR arbitrarily limits its analysis of impacts on public park users to visitors in Kaweah Oaks Preserve and Cutler Park. DEIR at 4.1-16, 19; see also DEIR at 4.1-53, 54, 55 (not mentioning impacts to viewers from the bike paths). Given the proximity of the bike paths and city park to the Alternative Project alignments, users of these paths and this park would experience a significant deterioration in aesthetic quality due to the Project. A recirculated DEIR must analyze these impacts.

The St. Johns River bike path traverses the northeastern part of the city of Visalia from west to east, following the St. Johns River. See Exhibit C (City of Visalia, Trail Linkages Plan); Exhibit F (River Run Ranch Development map). The riverway is a semi-wild natural area that offers a respite from the City’s urban environs and is an oasis for walkers, runners and bicyclists. The developed portion of the pathway currently traverses from west of SCE’s ROW, through the ROW, and ends approximately an eighth of a mile to the east of the ROW. A well-used unofficial trail continues from that point all the way to Cutler Park and beyond.

Construction of large, new transmission lines and towers on the Alternative alignments would cause significant visual impacts to bicyclists and pedestrians on the St. Johns bike bath. The tall, tubular steel towers would be highly visible against the backdrop of the Sierra Nevadas, and the increased number and height of transmission lines would significantly detract from what are now spectacular views of the Sierras. See Exhibit N (Photos from St. Johns path, from a point between Lovers Lane and McAuliff St. looking east). As you can see in the photos attached in Exhibit N, SCE’s current transmission towers and lines do not rise above treeline, making them only moderately obtrusive visually. The DEIR fails to analyze the significant visual impacts the proposed new transmission lines and towers would cause for users of the St. Johns bike trail.

Similarly, the Mill Creek trail is a well-used urban pathway that provides pedestrians and bicyclists with a scenic transportation and recreation corridor through the City. This path currently stops approximately a half mile west of SCE’s ROW, but the

↑ O25-10
cont.

O25-11

↓

Mr. Jensen Uchida
July 31, 2009
Page 13

City plans to extend the path across the ROW to the eastern edge of the City limits. See Exhibit C (City of Visalia Trail Linkages Plan). The visual impact of the new, 120-160 foot high transmission lines on path users would be severe, especially given that the paths represent one of the few places in Visalia for residents to escape the developed, urban feel of the City.

The DEIR’s own standards for measuring the severity of aesthetic impacts in this location demonstrate that the impact would be high. See DEIR at 4.1-17 (describing impact measurement methodology). For instance, bicyclists and pedestrians would view the transmission lines for a long period of time because the views would be only partially screened, the new, tall towers would be visible from a long distance, and bicyclists and pedestrians do not travel fast. Thus, the transmission lines would likely be visible in the background, middleground and foreground as bicyclists and pedestrians approached the lines. See DEIR at 4.1-17 (describing viewing distances). Further, as the DEIR admits, park users are a sensitive user group. DEIR at 4.1-43 (“sensitive receptor locations [include] residential areas, city parks, or pedestrian environments.”). The DEIR’s failure to analyze these significant impacts to a sensitive user group renders its analysis inadequate.

The DEIR also fails to adequately analyze the impact of the Project on residents in the area by underestimating both the number of residents affected as well as the severity of the Project’s impact on their views. See *Ocean View Estates Homeowners Ass’n, Inc. v. Montecito Water Dist.*, 116 Cal. App. 4th 396, 401-03 (2004) (environmental document must analyze and mitigate aesthetic impacts to public and private views). For instance, the document acknowledges that in the first 1.1 miles of the proposed Project alignment (which is identical in the Alternative alignments as well), the transmission lines would pass “within a few hundred feet of several medium-density residential developments.” DEIR at 4.1-3. It also states that the viewers primarily affected in this area would be nearby residents; specifically, 52 property owners whose properties abut the existing ROW. However, the DEIR severely underestimates the number of people who will be affected in this area, as it appears to assume that residents of only 52 properties who live adjacent to the ROW will be impacted. Also, for Alternative alignments 2, 3 and 6, which would proceed north after the 1.1 mile mark, the DEIR simply states that the transmission lines would pass within a quarter mile of “several residential subdivisions,” but gives no detail regarding the number of people that would be affected. DEIR at 4.1-13.

Contrary to the DEIR’s assertion that only a few dozen residents will suffer aesthetic impacts in the proposed Project’s first 1.1 mile section immediately north of Rector Substation, thousands of people will actually be affected. In fact, in this first section of the proposed Project, approximately 500 existing homes with existing

↑

O25-11
cont.

O25-12

↓

Mr. Jensen Uchida
July 31, 2009
Page 14

obstructed views of the Sierra Nevada range will experience an increase in intensity of the obstruction. See Exhibit B (Southern California Edison Proposed Routes) and Testimony of Michael Olmos, City of Visalia, attached as Exhibit G. Also, approximately 850 existing homes that do not currently experience any visual obstruction of the mountains will experience such an obstruction after completion of the Project. *Id.*

Even more residents would be affected by the proposed Project in the three-mile section of the Alternative 2, 3 and 6 alignment that runs north from the end of the first 1.1 mile section. In this section of the Project, approximately 1000 existing homes with existing obstructed views of the Sierra Nevada range will experience an increase in intensity of the obstruction, and approximately 2000 existing homes that do not currently experience any visual obstruction will experience such an obstruction after completion of the Project. *Id.* Given that one of the DEIR's criteria for determining the significance of an aesthetic impact is the number of people whose views would be affected, DEIR at 4.1-1, and given that the Project would cause significant visual changes from existing conditions, these sections of the Project would clearly result in significant aesthetic impacts. The DEIR's analysis of impacts to only 52 residential properties in the first 1.1 mile section of the Project, and its failure to identify the number of people affected in the next three mile section in the Alternative alignments, renders its analysis woefully inadequate.

C. The DEIR's Photo Simulations are Inadequate.

Visalia is situated a mere fifty miles from Sequoia National Park, and the City's identity is profoundly linked to the stunning Sierra Nevada Range that lies just to the east of the City. On clear days, views of the mountains from the eastern parts of the City can be breathtaking. See Exhibits E, N. Even though the DEIR notes that the City has policies in place to protect scenic corridors (see DEIR at 4.1-22, 23), and even though the DEIR contains numerous photos of the Project area, the document entirely fails to include any photos of the Sierras in its visual simulations. As shown by the photos in Exhibits E and N, the Sierra Nevadas are the dominant visual resource to the east of the City, providing stunning views of high peaks and rolling foothills. This backdrop, though sometimes obscured due to air pollution, is one of the most important aesthetic resources for residents in the City. The DEIR's failure to include any photographs that include the mountains, and that show how the proposed and Alternative Project alignments would impact views of the mountains, renders the DEIR inadequate for carrying out CEQA's fundamental purpose of informing government decision makers and the public about the potential significant impacts of the Project. 14 Cal. Code Regs. § 15002(a)(1), *Napa Citizens for Honest Gov't v. Napa County Bd. Of Supervisors*, 91 Cal. App. 4th 342, 356 (2001) (An EIR must provide decision-makers with enough information to make an intelligent judgment regarding a project's environmental impacts).

O25-12
cont.

O25-13

Mr. Jensen Uchida
July 31, 2009
Page 15

D. The DEIR Fails to Analyze Aesthetic Impacts Associated with the Creation of and Changes to the Right-of-Way Itself.

The DEIR entirely fails to analyze the visual impacts of creating a new ROW that will cut through agricultural, urban and semi-urban lands. The proposed new ROW will create a visual scar that will divide the landscape and current and future neighborhoods. Similarly, the DEIR completely ignores the visual impacts the Project will have on the existing ROW. Although it acknowledges that there will be temporary impacts due to construction, the DEIR fails to analyze the ways in which the Project will alter the visual characteristics of the existing ROW even after construction is finished. DEIR at 4.1-40, 41. The Project will cause long-term impacts due to construction because it will require the use of heavy equipment for land clearing and excavation in order to construct tower foundations and tension the transmission lines. DEIR at 4.1-41. This work will disturb the soil and remove much, if not all, vegetation in the ROW. This will create a significant aesthetic impact, yet the DEIR completely ignores this impact. Further, as described below, the DEIR fails to require any mitigation to reduce this impact to a less than significant level.

Transmission line ROWs can be stark, barren, unused scars that run for miles across the landscape. This is illustrated in the "before" photographs in Exhibit H, which depict a Pacific Gas and Electric transmission line corridor in San Jose, California. Grass is overgrown and dead, the ground is characterized by dirt and rocks as opposed to any plantings, and the area is visually unappealing. There is no landscaping to soften the bare dirt and views of the towers, and no trail or other appealing features to draw people to the area. Instead, the imposing towers and lack of landscaping has created a "dead zone" around the towers, which is self-perpetuating: lack of initial planning leads to an unattractive area, which leads to lack of use and upkeep, which leads to further deterioration and blight. This creates not only a visually unappealing area, but also divides existing and future communities and creates poor economic conditions that would negatively impact future residents and developers.

The DEIR fails to analyze such economic, social and visual effects in the context of determining the significance of the Project's aesthetic impacts. This is contrary to CEQA, which states that "[e]conomic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community . . . the social effect on the community would be the basis for determining that the effect would be significant." 14 Cal. Code Regs. § 15131(b). Here, the Project will divide existing and planned communities by creating a visual scar, lowering property values adjacent to the ROW, and interfering with planned growth. See Section I of these comments, above, regarding interference with land use planning. These social and

O25-14

Mr. Jensen Uchida
July 31, 2009
Page 16

economic effects, combined with the direct visual effects of the proposed Project, unquestionably make the entire Project's physical impacts significant.

E. The DEIR Fails to Analyze Indirect Aesthetic Impacts.

As described above, transmission lines, if not adequately integrated into communities through use of appropriate visual screening, landscaping and planning for conjunctive uses, can cause environmental impacts by driving down property values and creating unused and visually displeasing space. The situation is somewhat similar to big box retailers that move into the suburbs, thereby displacing downtown businesses and leading to deterioration of the downtown. Such "changes to the physical environment caused by a project's economic effects are an indirect effect that must be analyzed in an EIR." Stephen Kostka and Michael Zischke, Practice Under the California Environmental Quality Act, § 13.64, p. 678 (citing 14 Cal. Code Regs. §§ 15064(c), 15131(a)); see also *Bakersfield Citizens for Local Control v. City of Bakersfield*, 124 Cal. App. 4th 1184 (2004) (holding that a lead agency must assess indirect physical impacts caused by urban decay).

In the case of high voltage transmission lines, property adjacent to such lines is generally more difficult to sell and less desirable. See Exhibits A, I. People – rightly or not – fear the electromagnetic fields emitted by transmission lines, as well as dislike the visual aspects of the lines. See Alix Freedman, *The Wall Street Journal*, December 8, 1993, attached as Exhibit J. When property values decline due to factors such as adjacent transmission lines, neighborhoods can be destabilized as families move out and properties take longer to sell or transition to the rental market. This sort of community destabilization is self-perpetuating and can cause neighborhood decline and blight. Without compensating landscaping, maintenance and features such as pathways or public parks, transmission line ROWs easily become deserted, blighted areas that are visually unappealing. As a consequence, adjacent lands also become less desirable. The DEIR fails to analyze these indirect aesthetic impacts that will be caused by the project's economic as well as direct visual impacts.

F. The DEIR's Standards of Significance do not Adequately Measure the Project's True Impacts.

The DEIR's standards of significance are inadequate because they do not take into account the numerous inconsistencies with local and regional plans. These plan policies show that local cities and towns place a very high value on their visual resources; thus the DEIR should be more conservative in its standards of significance, taking into account local values regarding what constitutes a significant impact. For instance, the City of Visalia's General Plan states that "[t]he undergrounding of utility lines shall be

O25-14
cont.

O25-15

Mr. Jensen Uchida
July 31, 2009
Page 17

pursued and encouraged," and the General Plan sets a goal to "[w]ork with utilities . . . to landscape power line [] right-of-ways throughout the community and to underground utilities . . ." DEIR at 4.1-23. Clearly, the City considers any power lines to be visually intrusive and requires landscaping of rights-of-way as well as undergrounding where possible. Yet the proposed Project proceeds in the exact opposite direction, not requiring undergrounding or landscaping, but proposing to build miles of new, above-ground transmission lines. The DEIR must take these inconsistencies into account in its determination of significance.

As shown throughout these comments, the aesthetic impacts of the Project are significant despite the significance standards used in the DEIR. Further, as described below, the DEIR's minimal mitigation measures will not render the Project's aesthetic impacts less than significant. Thus, the Commission must re-analyze the Project's aesthetic impacts in relation to this new evidence and standard. See *Protect The Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1111 (2004) (an agency may not reach a determination of "no significant impact" by applying significance criteria that fail to account for particular impacts). Alternatively, the Commission must justify the basis for its standards of significance given that its standards ignore inconsistencies with local plans and do not result in a finding of significant impacts. See, e.g., *Mira Mar Mobile Community v. City of Oceanside*, 119 Cal. App. 4th 477 (2004); *National Parks & Conservation Ass'n v. County of Riverside*, 71 Cal. App. 4th 1341, 1355 (1999).

G. The DEIR's Mitigation Measures are Inadequate.

CEQA requires agencies to adopt feasible measures when approving a project to reduce or avoid its significant environmental effects. Pub. Res Code § 21002, 21081(a). Here, the DEIR requires only two mitigation measures that will mitigate the Project's long-term aesthetic impacts. DEIR at 4.1-40. These measures require that transmission poles be treated with appropriate colors, finishes and textures to blend the structures with the visible backdrop landscape, and that transmission line conductors, insulators and lattice structures be non-specular, non-reflective and non-refractive. DEIR at 4.1-40. However, these measures will not mitigate for all of the significant aesthetic impacts of the transmission lines, ROW and poles. Further, the DEIR does not even propose these measures along the entire length of the proposed Project alignment.

1. The DEIR Fails to Require Feasible Measures to Mitigate for Aesthetic Impacts Caused by the Proposed Project.

As described above, there are significant aesthetic impacts associated with creating a new ROW that will visually divide the landscape and leave it barren and

O25-15
cont.

O25-16

Mr. Jensen Uchida
July 31, 2009
Page 18

unused in some sections. Similarly, there will be visual impacts associated with construction of the Project on the existing ROW, even after the construction is finished. Despite these significant impacts, the DEIR does not propose mitigation to make the ROW less visually jarring, such as replanting vegetation or undertaking landscaping. DEIR at 4.1-41, 42. Given the absence of any plans to landscape the ROW to fit in with the community or provide an attractive pathway or other resource, the public and decision makers are left to assume that SCE will not manage or replant the ROW and that it will remain a visual scar, in a state of disuse, disrepair and blight.²

There are numerous feasible mitigation measures that would address the visual impacts associated with the planned, stark transmission line ROW as well as the new, taller transmission towers and increased number of lines. Such measures include landscaping, creation of a pathway or greenway under the transmission lines, or creation of a landscape plan. Other mitigation could include creation of a committee to develop a conjunctive use plan for the ROW that will make it visually appealing and keep it from becoming a dead zone that divides communities and mars the landscape. The “after” pictures in Exhibit H (PG&E Transmission Line Corridor photographs) show the feasibility and desirability of undertaking a comprehensive ROW land use and landscaping plan. These photos depict a Pacific Gas & Electric ROW in San Jose, California where the ROW was turned into a public pathway instead of remaining an unused eyesore. See also Gary Holisko, *Developing Near Transmission Lines?*, Planning West Magazine, July/Aug 2008, p. 34, attached as Exhibit K (encouraging development of community amenities within transmission line ROWs).

Creation of a multi-use public open space area in portions of the Project ROW that pass through existing and planned communities would be a feasible measure to mitigate the significant aesthetic impacts of the Project. In addition, such an open space use would, as discussed in Section I above, mitigate for the Project’s significant land use impacts. Although conjunctive use of utility ROW’s requires careful planning in order to make sure that the use is not incompatible with the transmission of electricity, many conjunctive uses are clearly feasible. In fact, SCE has “[o]ne of the most progressive

² The DEIR does require replacement of top soil after construction to mitigate impacts to agricultural land on portions of the ROW that cross agricultural land. DEIR at 4.2-11. However, the Project will also cross through developed and developing areas in Visalia and (in the proposed Project alignment) Farmersville and Lemon Cove. DEIR at Figure 2-3. Presumably, agricultural crops are not grown in these areas or would not be re-grown after construction of the proposed Project. The DEIR provides no mitigation for the ROW’s visual impacts in these areas.

O25-16
cont.

Mr. Jensen Uchida
July 31, 2009
Page 19

secondary land use programs” in the state. Miles Anderson, *Secondary Land Use: Utility Rights of Way in Southern California*, p. 25, attached as Exhibit L. SCE currently allows many different conjunctive land uses on ROW’s in southern California, including “golf courses, parks, playgrounds, horse stables, amusement parks, agricultural land, self storage facilities, retail stores, public recreation facilities,” and more. *Id.* at 26. A linear public park and trail are clearly feasible measures that SCE could implement along portions of the proposed Project or Alternative alignments.

A conjunctive use committee should be formed to study mitigation options and develop recommendations for conjunctive uses on particular sections of the ROW that pass through areas in or near Visalia and other communities. The revised DEIR should identify specific standards that would guide the committee’s process and final recommendations, and that would identify stakeholder groups that should be represented on the task force. The purpose of the committee would be to identify the most important areas where conjunctive uses on the ROW would mitigate the Project’s impacts on the surrounding communities and develop recommendations for feasible conjunctive uses that would mitigate these impacts. As the Project proponent, SCE must be responsible for funding and carrying out all mitigation measures, including the committee’s work and the mitigation measures that are developed through the work. However, the committee itself should be made up of interested individuals that can represent the community’s interests. The committee should work with and include members of Visalia’s Bicycle, Pedestrian and Waterways Trails Committee, which currently serves as an advisory board to the City Council and advocates for a network of safe, accessible and attractive pedestrian and bicycle routes through the City.

The committee should also identify landscaping that would best mitigate the visual impacts of the Project. “Landscaping provides one of the most effective methods to diffuse the effects of power lines and use the space within and adjacent to the right of way in a manner which is aesthetically pleasing and an amenity to homeowners. Screening can enhance the quality and intimacy of the immediate setting by creating the perception that towers have receded into the distance.” See Exhibit K (*Developing Near Transmission Lines?* at 34). A well landscaped ROW where conjunctive uses were allowed would turn an eyesore into a community amenity. Further, creating a pathway along the portion of the ROW in the Alternative 2, 3 and 6 alignments that is in the City of Visalia would connect the existing Mill Creek and St. Johns River trails and would provide access to Culter Park, a new sports park and a future community park that will be near the SCE transmission lines, north of Mineral King. By providing these important trail connections, the transmission line corridor would serve to integrate the ROW into the community’s overall urban structure, thereby mitigating its impacts to land use and preventing the decline of adjacent neighborhoods.

O25-16
cont.

Mr. Jensen Uchida
July 31, 2009
Page 20

Another feasible mitigation measure that the DEIR fails to require is an evergreen vegetative screen of sufficient height for immediate visual screening around the Rector Substation. Although there is current screening on the southern and eastern sides of the Substation, screening should be provided on the north and western sides as well. Similarly, the DEIR fails to analyze the feasibility of mitigation that would require matching the structure spacing in locations where new transmission towers will parallel existing towers. For instance, along the first 1.1 miles of the proposed Project alignment, new transmission towers would be erected parallel to new double-circuit transmission structures. DEIR at 4.1-43. Likewise, along the Alternative 2, 3 and 6 alignments, new double circuit transmission towers would be constructed along the western side of the ROW, while the existing single circuit towers would be consolidated on new double circuit towers on the eastern side of the ROW. DEIR at 3-10, 3-13, 3-16. SCE should match existing structure spacing and spans as closely as possible in these areas to avoid or reduce the number of off-setting tower placements. This would reduce visual complexity as seen from sensitive receptor locations.

O25-17

The DEIR does not state what rights SCE owns in its ROW, and therefore it is not clear whether a pathway could be constructed without SCE, the City of Visalia or another party first acquiring an easement (or fee title) for the purpose of creating a trail. However, SCE has the right of eminent domain and may “condemn any property necessary for the construction and maintenance” of its transmission lines. Pub. Utilities Code § 612.³ Under CEQA law, an agency’s mitigation authority is as broad as its express or implied powers granted by other law. *Golden Gate Bridge Dist. v. Muzzi*, 83 Cal. App. 3d 707 (1978). In *Golden Gate Bridge Dist.*, the court held that a district’s power to condemn property for construction of a project implicitly includes the power to condemn property to mitigate environmental impacts resulting from the project. *Id.* at 713. Thus, SCE has the legal authority to acquire the rights necessary to construct a public trail, which would mitigate the proposed Project’s numerous environmental impacts. Of course, it would be far preferable to work with the owners of the land underlying the easement instead of resorting to condemnation, and the City would fully

O25-18

³ This provision gives “electrical corporations” the right to condemn property for the construction and maintenance of an “electrical plant.” “Electrical corporation” is defined as “every corporation or person owning, controlling, operating, or managing any electric plant for compensation within this state . . .” Pub. Utilities Code § 218(a). “Electrical plant” is further defined to include “all real estate, fixtures and personal property owned, controlled, operated, or managed in connection with or to facilitate the production, generation, *transmission*, delivery, or furnishing of electricity . . .” Pub. Utilities Code § 217 (emphasis added).

Mr. Jensen Uchida
July 31, 2009
Page 21

support efforts to work with such landowners within the City’s Urban Development Boundary and Urban Area Boundary to find acceptable solutions. As one of the owners of land underlying portions of the easement, the City is also willing to work directly with SCE on developing a conjunctive use plan on its land in the ROW. Regardless of the method by which rights to the land underlying the ROW are acquired for conjunctive uses, the DEIR’s failure to include this feasible mitigation is unlawful and renders the document inadequate.

O25-18 cont.

If one of the Alternative alignments is selected as the final Project alignment, a multi-use path or a bike trail would provide especially relevant and useful mitigation, as the trail would connect the St. Johns River Trail in the north with the Mill Creek Trail in the south, and would provide public access to Cutler Park and a new city sports park to the south of Cutler Park. *See Exhibit C (City of Visalia Trail Linkages Plan)*. Such mitigation would offset the Project’s negative visual impacts to existing parks as well as its impacts to land use planning.

The DEIR also fails to require, or even analyze, undergrounding of a portion of the proposed Project. This is a feasible mitigation measure that would mitigate significant impacts to aesthetics and land use. Please refer to Section V of these comments on Alternatives for further discussion of the feasibility and rationale for undergrounding.

O25-19

2. The DEIR’s Proposed Mitigation Measures are Inadequate to Support its Conclusions.

The DEIR includes virtually no analysis of how effective its proposed mitigation measures will be at reducing the aesthetic impacts of the Project, and it provides no significant evidence that the Project’s impacts will be reduced to a less than significant level. An agency may not make such conclusory assertions in the absence of substantial evidence. *See National Parks & Conserv. Ass’n v. County of Riverside*, 71 Cal. App. 4th, 1341, 1366 (1999) (analyzing agency’s basis in expert opinion and other evidence before concluding that project’s potential impacts would be mitigated to insignificant level). Instead, an EIR must contain facts and analysis, not just an agency’s bare conclusions. *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553, 568 (1990).

O25-20

For instance, the DEIR finds that the Project will result in less than significant aesthetic impacts in certain areas along SR 198 after implementation of Mitigation Measure 4.1-1. DEIR at 4.1-45. This measure requires that transmission poles be treated with appropriate colors, finishes and textures to blend the structures with the visible backdrop landscape. DEIR at 4.1-40. However, the DEIR offers no evidence

Mr. Jensen Uchida
July 31, 2009
Page 22

to support its assertion that this measure will, in fact, reduce the impacts of the Project to a less than significant level. It offers no information from planners, aesthetic experts, or professionals who have used such mitigation previously or who can attest to the fact that such mitigation actually works. Indeed, it is difficult to believe that painting a tower one color will make it blend in against multi-hued backgrounds that change in color from day to day and season to season. Further, in the photo simulations, the DEIR does not state whether or not the simulated transmission towers are depicted as they would appear with the mitigation measure or without. DEIR at Figure 4.1-3a to 4.1-13b. Nor does the DEIR photographically compare a transmission tower without mitigation to one with it to allow the public to determine whether the mitigation reduces the impacts to a level that is no longer significant. This failure makes it impossible for the DEIR to carry out CEQA's fundamental purpose of informing government decision makers and the public about the potential significant impacts of the Project. 14 Cal. Code Regs. § 15002(a)(1).

3. The DEIR Must Expand the Areas in Which it Requires its Proposed Mitigation.

As described above, the DEIR requires mitigation in the form of appropriate colors, finishes and textures on transmission poles; however, it requires this mitigation only in a few, select locations. DEIR at 4.1-40. Specifically, the DEIR states that for "all structures that are visible from moderate to highly sensitive viewing locations . . . SCE shall apply surface coatings with appropriate colors, finishes, and textures to blend the structures with the visible backdrop landscape." DEIR at 4.1-40. However, the DEIR requires such coatings only on ten transmission towers that are near SR 198 and SR 245. DEIR at 4.1-40 (mitigation measure 4.1-1a). Assuming that this mitigation measure actually works, it must be required on more locations within the Project alignment.

The ten towers listed in the DEIR are not the only ones that are located in sensitive viewing locations. In fact, the DEIR admits as much, stating on page 4.1-43 that "sensitive receptor locations [include] residential areas, city parks, or pedestrian environments." Yet the DEIR does not require surface coatings to blend the structures with the backdrops near such residential areas, city parks or pedestrian environments. DEIR at 4.1-44. For instance, the DEIR does not require this mitigation measure for the first 1.1 miles of the proposed Project alignment, even though, as described elsewhere in these comments, more than a thousand existing residents would have their views negatively impacted by the proposed Project. DEIR at 4.1-44. Similarly, it does not require this mitigation measure on the towers in the Alternative alignments that would be near Cutler Park in the City of Visalia, or the city park adjacent to the River Run Ranch development in Visalia. See Exhibit H (River Run Ranch Development) (showing location of town park adjacent to, and underneath, ROW); DEIR at 4.1-53 (not requiring

O25-20
cont.

O25-21

Mr. Jensen Uchida
July 31, 2009
Page 23

surface coating mitigation in this section of the Alternative 2 alignment, which is the same as the other Alternative alignments in this location). As described above, the Project would cause significant aesthetic impacts in all areas where sensitive viewers would see the transmission lines, not just a few areas near SR 198 and other roads. Thus, these mitigation measures should be required in all areas where residents, park users or motorists would be exposed to views of the new transmission towers and lines.

III. The DEIR Fails to Adequately Analyze or Mitigate the Project's Noise Impacts.

A particularly glaring inadequacy of the DEIR is its analysis of and mitigation for the Project's noise impacts. The proposed Project, or any of the Alternative alignments, would generate two distinct categories of noise impacts: construction-related noise, and noise associated with corona discharge. Inasmuch as some of the closest sensitive receptors will be no more than 50 feet from construction activities and the new transmission lines, the DEIR should have carefully evaluated the increase in noise levels from construction and operation of the proposed Project.

A. The DEIR's Analysis of Noise Impacts is Hamstrung by Its Failure to Consider All of the Impacted Receptor Locations.

Given the alignment of the proposed Project and the Alternative routes through the eastern edge of established communities in Visalia, it is likely that the proposed transmission corridor would impact thousands of sensitive receptors. See Exhibit A (Letter from Mayor Gamboa) which identifies the number of residences and individuals within the City of Visalia that would likely be impacted by the proposed Project. While the document generally asserts that there are "a number of residences" located within 200 feet of the first 1.1 miles and there are rural residences intermittently along the remaining 17.4 miles of ROW (at 4.10-6), it never specifically identifies the number, type or specific location of sensitive receptors that would be potentially affected by construction of the Project as well as those that might be exposed to elevated noise levels from the constant hum associated with the lines. Since the DEIR omits this critical information, it is simply not possible to evaluate the Project's noise impacts.

The revised DEIR must provide detailed documentation, including maps, identifying those sensitive receptors that have the potential to be impacted by the proposed Project. In addition to identifying residences, the revised document must identify any other sensitive receptors such as motels and hotels, libraries, religious institutions, hospitals, nursing homes, active sport areas, picnic areas, recreation areas, and playgrounds that would be potentially affected by the proposed Project.

O25-21
cont.

O25-22

Mr. Jensen Uchida
July 31, 2009
Page 24

B. The DEIR's Analysis of Construction Noise Impacts is Deficient.

The DEIR fails to evaluate the actual and specific consequences of construction-related noise on nearby sensitive receptors; it cavalierly concludes that impacts would be less than significant. (See DEIR at 4.10-12 where the document concludes that construction activities would not conflict with applicable noise ordinances and plans and DEIR page 4.10-15 where the document concludes that noise levels generated by construction equipment would be mitigated to a less than significant level). Given the very high decibel level of construction equipment and the proximity of sensitive receptors to all of the proposed corridor's potential routes, the DEIR should have provided a comprehensive analysis of these impacts. This type of evaluation is necessarily complex, requiring a thorough understanding and description of the amplitude and duration of noise exposure at receptor locations along the entire length of each potential route alignment. Absent a thorough evaluation of the construction noise environment, it is impossible to make a finding regarding a substantial temporary or periodic increase in ambient noise levels. The DEIR thus fails to provide the evidentiary basis to conclude that construction-related noise impacts would be less than significant. Set forth below are the most egregious deficiencies in the DEIR's analysis of noise impacts.

O25-23

1. Equipment and Helicopter Noise

Construction equipment can generate noise levels as high as 98 dBA at a distance of 50 feet, while helicopter operations can generate noise levels of approximately 80 dBA at a distance of 200 feet. DEIR at 4.10-15 and 16. As a point of reference, 98 dBA is considered "very loud" by acoustical engineers and is equivalent to the noise a passing train generates while standing on the train platform. See Typical Sound Levels, Handbook of Environmental Acoustics, attached as Exhibit M. Rather than comprehensively describing the noise levels that nearby sensitive receptors would experience from construction-related operations, the DEIR simply states that construction equipment noise and noise from helicopter operations that the Project "would have the potential to impact nearby sensitive receptors." *Id.* at 4-10-16. This generic statement does not come close to meeting CEQA's clear standards which require that an EIR provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow decision-makers to make intelligent judgments. Consistent with this requirement, the information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning and Information Council of Western El Dorado County v. County of El Dorado*, 131 Cal. App. 3d 350, 357 (1982) (finding an EIR for a general plan amendment inadequate where the document did not make clear the effect on the physical environment).

O25-24

Mr. Jensen Uchida
July 31, 2009
Page 25

The DEIR does not provide the locations and distances between the sensitive receptors and the construction activities and helicopter operations. Noise levels expected at the sensitive receptors are also not predicted. Nor does the DEIR disclose how long receptors would likely be impacted. Increased noise levels over the course of a few days may not be a source of concern. Elevated noise levels over the duration of the construction period, which would take between 9 and 12 months, on the other hand, may become intolerable. See DEIR at 2-34. Yet, the DEIR is silent on all of these effects. An adequate analysis of construction noise impacts would include the locations of sensitive receptors in the Project area, a description of existing ambient noise levels at these receptor locations, predicted noise levels during each phase of construction at each sensitive receiver location, and a comparison of noise levels during construction to the existing ambient noise levels. This analysis must also take into account the type, duration, amplitude, topological conditions, specific construction techniques, and construction durations to determine whether noise levels would substantially increase. Only upon completion of this analysis will the DEIR preparers be in a position to evaluate whether measures exist to mitigate construction related noise impacts.

O25-24
cont.

Moreover, the DEIR provides no evidence to support the conclusion that the proposed mitigation measures would reduce noise levels from construction-equipment to a less than significant level. The DEIR provides a generic suggestion that compressors and other small stationary equipment should be shielded with portable barriers (at 4.10-17), but the DEIR omits any detail as to the feasibility of installing such barriers. Nor does the DEIR identify which specific noise sources would be attenuated, or describe the expected resultant noise level. The DEIR offers no mitigation for the helicopter-related noise impacts other than promising to notify residents of the construction schedule and a hotline for residents to call with complaints. *Id.* To conclude as the DEIR does, that an impact is less than significant, the analysis must be supported with substantial evidence. Substantial evidence consists of "facts, a reasonable presumption predicated on fact, or expert opinion supported by fact," not "argument, speculation, unsubstantiated opinion or narrative." Pub. Res. Code § 21080(e)(1)-(2). Because the DEIR conclusion of insignificance is premised on unsupported assumptions and bald conclusions, it falls far short of this threshold.

2. Nighttime Construction Noise

The DEIR's analysis of nighttime construction-related noise is also legally deficient. In one instance, the document states that construction activities located in Visalia would be limited to between the hours of six a.m. and seven p.m. on weekdays. DEIR at 4.10-12. Yet the document also states that SCE may determine that nighttime construction may be necessary. *Id.* at 4.10-12 and 4.10-16. The DEIR correctly acknowledges that if construction activities were to occur at night, it could result in a

O25-25

Mr. Jensen Uchida
July 31, 2009
Page 26

significant nuisance impact to nearby residences and that SCE would be required to obtain variances consistent with the regulatory requirements of the jurisdiction where the work would take place. *Id.* Yet, the DEIR never actually explores the effect that nighttime construction noise would have on sensitive receptors. Noise can be far more intrusive during the evening and nighttime hours when ambient noise levels are at their lowest and when sensitive receptors are sleeping. Since the surrounding area is quieter at these times, the masking effect of other noise would not screen construction noise. The DEIR's failure to take into account this higher sensitivity to noise and evaluate how the increase in noise from nighttime construction would affect receptors during these sensitive time periods renders the DEIR legally inadequate.

O25-25
cont.

Nor does the DEIR propose adequate mitigation for impacts created by nighttime construction operations. Although the DEIR looks to the preparation of a nighttime noise reduction plan, this plan does not yet exist. Instead, the DEIR simply lists the types of noise attenuation strategies that *may* be included in the plan. DEIR at 4.10-17 (emphasis added). The document does not, however, set forth sufficient specific, measurable performance standards for the noise reduction plan that could justify later formulation of noise attenuation strategies targeted to meet those standards. Thus, the DEIR provides no basis to judge the effectiveness of the noise reduction plan. Rather, it is a "mere expression[] of hope" that SCE will be able to devise a way around the problem of nighttime noise. *Lincoln Place Tenants Ass'n v. City of Los Angeles*, --- Cal. App. 4th ---, 2005 WL 1635178, at *10 (July 13, 2005). CEQA requires more than that to mitigate significant impacts. *Id.*

3. Noise From Blasting Operations.

Although the Project would be required to conduct blasting at certain locations to eliminate rock obstructions, the DEIR does not adequately analyze impacts relating to noise or vibration levels from these blasting operations. Blasting operations may generate noise levels of up to 115 dBA at 50 feet. DEIR at 4.10-18. As a point of reference, this noise level ranges somewhere between the maximum noise level at a rock concert and an air raid siren at 50 feet (120 decibels is considered by acoustical engineers to be the threshold of pain.) *See* Exhibit M (Typical Sound Levels). Moreover, by the DEIR's own admission, blasting operations can cause structure damage (*see* DEIR at 4.10-14, second to last bullet). But here too, the DEIR excuses itself from conducting the actual analysis of impacts with the claim that areas where blasting would be utilized have not been determined, and thus it is difficult to assess the potential impacts on sensitive receptors. DEIR at 4.10-13. The DEIR's treatment of noise and vibration impacts relating to blasting operations clearly violates CEQA. As explained by the Court in *Laurel Heights Improvement Ass'n of San Francisco v. Regents of the University of California*, 47 Cal. 3d 376, 399 (1988) (*Laurel Heights I*), "[w]e find no authority that

O25-26

Mr. Jensen Uchida
July 31, 2009
Page 27

exempts an agency from complying with the law, environmental or otherwise, merely because the agency's task may be difficult." The DEIR preparers could have made some attempt to determine where blasting might be necessary, especially in the more urbanized locations along the Project alignment. Moreover, the analysis could have identified the decibel level of explosions at certain distances. The DEIR could have described, even generally, the peak particle velocity which would be used to evaluate the effect that blasting operations would have on noise sensitive receptors and buildings.

O25-26
cont.

Because the DEIR defers the analysis of impacts, it is not possible to conclude, as the DEIR does, that mitigation measures would reduce the impacts to a less than significant level. DEIR at 4.10-14. Indeed, the mitigation that is identified to reduce blasting-related impacts is so undefined that it is impossible to evaluate its effectiveness. The document calls for the preparation of a Blast Survey Workplan which would establish vibration limits and develop vibration and settlement threshold criteria. DEIR at 4.10-14. Rather than set forth specific vibration and settlement threshold criteria, the DEIR defers the identification of these criteria until the design process. Details relating to vibration and settlement threshold criteria must be identified prior to Project approval. *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal. App. 3d 61, 79.

C. The DEIR Fails to Adequately Analyze the Noise Impacts Relating to Corona Discharge.

Some locations along the proposed Project and Alternative alignments would pass by existing communities that currently do not experience any noise from high-voltage power lines. Some of these locations currently may experience very low ambient noise levels. As the DEIR itself notes, it is important to consider the ambient noise environment: "[i]f the ambient noise environment is quiet and the new source greatly increases the noise exposure, even through a criterion level may not be exceeded, an impact may occur." DEIR at 4.10-11.

O25-27

The City of Visalia's Municipal Code establishes a nighttime exterior noise level standard of 45 dBA. DEIR at 4-10-9. The DEIR concludes that corona noise levels from the proposed Project would be just one decibel short of triggering a violation of the City's noise standard (i.e., 44 dBA). *Id.* at 4.10-12. One decibel is certainly within the margin of error. We therefore disagree with the DEIR's conclusion that noise sensitive residential receptors would not be significantly impacted by the constraint source of noise generated by the high-voltage transmission lines.

Mr. Jensen Uchida
July 31, 2009
Page 28

D. The DEIR Omits Consideration of Feasible Mitigation Measures.

In large part because the DEIR fails to adequately analyze the Project’s noise impacts, it fails to identify feasible mitigation measures capable of minimizing these impacts. For example, the revised DEIR should analyze the following measures:

- For those segments of the routes which would not be located within the SCE existing ROW, and where the proposed ROW traverses undeveloped lands, increase the width of the ROW to allow increased separation from existing and future sensitive receptors.
- If impact equipment such as jack hammers, pavement breakers, and rock drills are used during construction, hydraulically or electric-powered equipment should be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, the construction contractor should place exhaust mufflers on the compressed-air exhaust and external jackets on the tools themselves where feasible.
- Prohibit nighttime construction activities (i.e., between 8:00 p.m. and 6:00 a.m.).
- Prohibit haul truck operations during the evening and nighttime hours (i.e., between 8:00 p.m. and 6:00 a.m.).
- Equipment staging and parking areas must be located as far as feasible from residential and school buildings.
- As feasible, the construction contractor should maintain construction noise levels at or below the 70 dBA indoor daytime speech interference criterion during daytime hours (7 a.m. to 10 p.m.), below the 50 dBA indoor nighttime sleep interference criterion at night (10 p.m. and 7 a.m.), and below applicable Visalia noise ordinance limits.
- SCE should offer to temporarily relocate to a nearby hotel any resident whose interior nighttime noise level due to Project construction activities exceeds 50 dBA with windows open. Exceedances of the 50 dBA criterion shall first be verified by field acoustical measurements.
- The following helicopter noise control measures shall be included in the construction contract specifications prepared for the Project, and applied, as

O25-28

Mr. Jensen Uchida
July 31, 2009
Page 29

feasible, to reduce exposure to helicopter pass-by and hovering noise at any particular residential receptor:

- Prepare a schedule accurately reflecting hover times for equipment and construction crew drop-offs and pick-ups that shall be made available at least two weeks in advance to impacted noise receptors within a distance to be determined by a qualified acoustical consultant as the Project progresses, depending on the noise level generated by the selected helicopter.
- Prohibit hovering during evening and nighttime hours (i.e., between 8:00 p.m. and 6:00 a.m.)
- Select routes to avoid direct flyovers above residences and other noise sensitive land use areas, to the extent feasible.

The revised DEIR should consider these or alternative feasible noise reduction measures in order to reduce the Project’s significant noise impacts.

IV. The DEIR Fails to Adequately Analyze and Mitigate Impacts Relating to the Loss of Agricultural Resources.

The proposed Project and each of the Alternative alignments pass through areas of Prime Farmland and Farmlands of Statewide Importance. See DEIR Figure 4.2-1. Certain of the alignments would also pass through Farmlands of Local Importance. *Id.* The DEIR finds that, for the proposed Project alignment, about 52 acres of agricultural lands would be expected to experience “temporary” impacts while 31 acres would be permanently impacted. *Id.* at 4.2-11. The DEIR falls short in identifying the exact acreage within Visalia that would be converted. This is important because, as discussed below, the document assumes that certain agricultural lands taken out of production to enable Project construction would be replanted. Consequently, the DEIR fails to identify mitigation for these “temporarily impacted” lands. Yet, the DEIR provides no evidence to support its assumption that these lands would be put back into agricultural production. Therefore, the DEIR must identify those parcels of land that would be impacted by the proposed Project so that the loss of these lands can be mitigated through appropriate mechanisms.⁴

⁴ A parcel-by-parcel identification of affected agricultural lands is also needed because it is not possible to verify the accuracy of the DEIR’s estimates of “temporary” (footnote continued)

O25-28
cont.

O25-29

Mr. Jensen Uchida
July 31, 2009
Page 30

The DEIR concludes that impacts relating to the “temporary loss” of agricultural lands could be mitigated to a level of less than significant with measures such as stockpiling and replacing soils. *Id.* at 4.2-12. The assumption behind this conclusion is that these lands would simply be put back into agricultural production once construction activities cease. The DEIR also casually suggests that any fiscal impacts related to loss of agricultural production are not considered impacts under CEQA and would be addressed by SCE during ROW acquisition. *Id.* The DEIR errs in its approach to analyzing these “temporary” impacts. Taking these lands out of production cannot be considered a temporary loss. Much of the land that would be “temporarily converted” is planted with walnut and orange trees. *See* Table 4.2-5. As the DEIR acknowledges, it takes walnut trees and orange trees about ten years to reach full maximum production. *Id.* at 4.2-12. Once this land is taken out of walnut and orange tree production, it is likely the land will *never* return to agricultural production. As such, the DEIR must include the loss of these lands as permanent impacts of the Project and propose specific and enforceable mitigation.

O25-30

In addition to the deficiencies in the DEIR’s analysis of Project-specific impacts to agricultural lands, the DEIR also fails to actually analyze the Project’s cumulative loss of agricultural lands. A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable future projects whose impacts might compound or interrelate with those of the project at hand. “Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.” CEQA Guidelines § 15355(b). The cumulative impacts concept recognizes that “[t]he full environmental impact of a proposed . . . action cannot be gauged in a vacuum.” *Whitman v. Board of Supervisors*, 88 Cal. App. 3d 397, 408 (1979).

O25-31

A cumulative impacts analysis is especially important in the present case because agricultural lands throughout California are diminishing at a rapid rate. Yet rather than assess how the proposed Project would contribute to this reduction in agricultural lands, the DEIR simply refers to a list of cumulative projects and states that

and permanent loss of agricultural lands without this information. For example, Table 4.2-5 states that 4.6 acres of walnut crops would be permanently disturbed by the proposed Project whereas page 4.2-15 states that 29 acres of walnut orchards would be permanently removed, and that this 29 acres is in addition to the 4.6 acres. At the same time, Table 4.2-4 identifies the loss of “total farmland” as 31.1 acres. This number does not appear to be accurate given the permanent loss of 33.6 (29 + 4.6) acres of walnut orchards alone.

Mr. Jensen Uchida
July 31, 2009
Page 31

since they are not yet in the planning stage, the acreage of farmland that could be converted by these projects is not known. *Id.* The DEIR then summarily concludes that “the acreage of Farmland in Tulare County is expected to decline” and that “the Proposed Project would contribute to this decline.” *Id.* Under CEQA, such self-evident ruminations cannot substitute for meaningful analysis. *City of Antioch v. City Council*, 187 Cal. App. 3d 1325 (1986). Rather, an EIR must contain analysis sufficient to allow informed decision-making. Moreover, such dismissive treatment of this important resource is not adequate under CEQA. Rather, the DEIR author must “use its best effort to find out and disclose all that it reasonably can” regarding the cumulative loss of agricultural lands. *Citizens to Preserve the Ojai v. Ventura*, 176 Cal. App. 3d 421, 431 (1986); *see also Laurel Heights Improvement Assn. v. Regents of the University of California*, 47 Cal. 3d 376, 399 (1988) (*Laurel Heights I*).

O25-31 cont.

The level of detail presented in the DEIR cumulative impact chapter’s list of projects (Table 3-12) is sufficient to permit an adequate analysis of the Project’s cumulative impact on agricultural resources. This table, along with a map depicting the exact location of these projects, identifies all sorts of pertinent information such as the Project name, address, land use, and acreage. With this information, the DEIR could have included at least a general analysis of the effect that these projects, together with the proposed Project, would have on local and regional agricultural lands. Moreover, inasmuch as these cumulative projects have been mapped, the DEIR could have determined the cumulative acreage of Prime Farmland, Farmlands of Statewide importance and Farmlands of Local Importance that would be impacted.

The DEIR must be revised to provide a legally adequate analysis of the Project-specific and cumulative impacts on agricultural resources.

V. The DEIR Fails to Consider a Reasonable Range of Alternatives.

The DEIR fails to comply with CEQA’s mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta*, 198 Cal. App. 3d 433, 443-45 (1988). As stated in *Laurel Heights Improvement Association v. Regents of University of California*, “[w]ithout meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the CEQA process . . . [Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA’s fundamental goal that the public be fully informed as to the consequences of action by their public officials.” 47 Cal. 3d 376, 404 (1998). The discussion of alternatives must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these

O25-32

Mr. Jensen Uchida
 July 31, 2009
 Page 32

alternatives would impede to some degree the attainment of the project objectives, or would be more costly. CEQA Guidelines § 15126.6(b).

Here, the DEIR fails to analyze any alternative that includes undergrounding a portion of the transmission line, even though undergrounding could mitigate the proposed Project's significant aesthetic impacts and minimize conflicts with Visalia's existing and planned community. The lack of an alternative that provides for partial undergrounding is particularly noticeable given that the DEIR discusses so many other possible alternatives, including alternatives such as demand side management and reconductoring. DEIR at 3-21 to 3-25 (discussing alternatives). Such an alternative could require undergrounding along SR 198, which would mitigate the significant visual impacts the Project would cause have on motorists using this highway, which is in the process of being designated as a scenic roadway. If the final alignment follows the route north through Visalia (Alternatives 2, 3 and 6), undergrounding would also mitigate for impacts to land use planning along Visalia Parkway, as described in Section I of these comments.

Undergrounding high voltage transmission lines is a feasible mitigation measure that the California PUC has required in other projects. For instance, the PUC approved the Sunrise transmission line project, which requires 5.9 miles of undergrounding. Final EIR/EIS, Sunrise Powerlink Project, Comparison of Alternatives at H-128 (Oct. 2008), available at: <http://www.cpuc.ca.gov/Environment/info/aspn/sunrise/feir/H%20Comp%20of%20Alts.pdf>. Similarly, the PUC approved an underground route for part of the northern and southern segments of Pacific Gas & Electric's Jefferson-Martin 230 kV Transmission Project in order to mitigate impacts to visual, land use and biological resources. PUC Decision 04-08-046, Opinion Granting a Certificate of Public Convenience and Necessity at 3-4, 18, 55, 67, 112, 140 (Aug. 19, 2004), available at: http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/39122.pdf. The DEIR is deficient in its failure to analyze and require undergrounding for portions of the proposed Project in locations containing particularly sensitive receptors and in locations where the proposed Project conflicts with current land use plans.

O25-32
 cont.

Mr. Jensen Uchida
 July 31, 2009
 Page 33

VI. Conclusion

In order to cure the panoply of defects identified in this comment letter, the DEIR must be revised to adequately assess the environmental impacts of the Project, and to identify effective mitigation measures and alternatives capable of alleviating these impacts. CEQA requires that the public have a meaningful opportunity to review and comment upon this significant new information, which should be presented in the form of a recirculated DEIR.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Fran M. Layton (PS)
 Fran M. Layton
 Erin Chalmers
 Laurel L. Impett, AICP, Urban Planner

cc: Alex Peltzer, Visalia City Attorney

List of Exhibits:

- A. Letter from Mayor Gamboa, City of Visalia to Mr. Jensen Uchida, September 22, 2008
- B. Southern California Edison Proposed Routes
- C. City of Visalia Trail Linkages Plan
- D. Proposed Visalia Parkway
- E. Photographs of Skyline (Index of Photographs and Six Photographs)
- F. River Run Ranch Development
- G. Testimony of Michael Olmos, City of Visalia
- H. PG&E Transmission Line Corridor, San Jose, California
- I. Testimony of Donald Fulbright
- J. Alix Freedman, The Wall Street Journal, December 8, 1993
- K. Gary Holisko, *Developing Near Transmission Lines?*, Planning West Magazine, July/Aug 2008
- L. Miles Anderson, Secondary Land Use: Utility Rights of Way in Southern California
- M. Typical Sound Levels, Handbook of Environmental Acoustics
- N. Photographs From St. Johns Path, from a point between Lovers Lane and McAuliff St. looking east

P:\VISALIA\PUC\DEIR Comments\LL1001 (DEIR Letter v 11).doc

September 22, 2008

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

RE: San Joaquin Cross Valley Transmission Loop Project

Dear Mr. Uchida,

Thank you for the opportunity to provide input regarding the proposed San Joaquin Cross Valley Transmission Loop Project that has been proposed by Southern California Edison. The Visalia City Council understands and appreciates the need for the project. However, the Council is also interested in seeing the impacts of this project fully considered, and the public made readily aware of the impacts identified, before a route is approved.

Portions of Alternatives Routes 1, 2, 3, and 4 are located inside the Visalia City limits, as well as within Visalia's adopted Urban Development Boundaries and Urban Area Boundary, so the City of Visalia is very interested in the findings of the EIR, the recommended mitigations, and the ultimate alignment of this transmission loop project.

As the CPUC begins its analysis, the City of Visalia believes it would be beneficial for you to have the following information as it relates to the proposed routes 1, 2 and 3:

Preferred Route 1:

Within one-half mile of the Preferred Route 1, there are currently 773 constructed dwelling units.

In addition, there are 184 residential lots on which residences have not yet been constructed (infill development), and there are 381 additional residential lots which have been approved through tentative subdivision maps.

In addition to the lots specified above, there are approximately 34 acres of undeveloped Rural Residential, 173 acres of undeveloped Low Density Residential land and 8 acres of undeveloped Medium Density Residential land. Using anticipated growth trends, these lands will accommodate approximately 762 dwelling units upon full buildout.

There are also approximately 260 acres of undeveloped Urban Reserve land. Estimating that this land would include 86% low density, 5% medium density, and 3% high density (this leaves 6% for commercial, schools, parks, etc.), these lands would accommodate 1,089 dwelling units upon full buildout using anticipated growth trends.

The California Department of Finance indicates that Visalia has an average of 2.975 people per household. Based on these figures, it is estimated that approximately 12,733

people in Visalia will live within a one-half mile radius of Preferred Route 1 upon build out.

Proposed Routes 2 & 3

Within one-half mile of the proposed routes 2 and 3, within the Visalia Urban Growth Boundary, there are currently approximately 1,870 constructed dwelling units, and an additional 302 residential lots on which residences have not yet been constructed (infill development).

In addition to these lots, there are also approximately 556 additional residential lots that have been approved through tentative subdivision maps.

In addition to the lots specified above, there are approximately 34 acres of undeveloped Rural Residential, 308 acres of undeveloped Low Density Residential land and 28 acres of undeveloped Medium Density Residential land. Using anticipated growth trends, these lands would accommodate approximately 1,456 dwelling units upon full buildout.

There are also approximately 1,209 acres of undeveloped Urban Reserve land. Estimating that this land would include 86% low density, 5% medium density, and 3% high density (this leaves 6% for commercial, schools, parks, etc.), these lands would accommodate 5,064 dwelling units using upon full buildout using anticipated growth trends.

In addition to these residential developments, it is expected that the urban reserve lands will include a mix of other land uses to serve this growing population including commercial, office, schools and parks, all of which are anticipated to draw people to the area from a greater distance than the one-half mile designation used here to develop these residential figures.

Based upon the State Department of Finance figures referenced previously, it is estimated that approximately 29,500 people in Visalia will live within one-half mile of the transmission line upon build out if the line follows routes 2 or 3.

With these statistics in mind, the City of Visalia clearly has an interest in the findings of this EIR. The City asks that the CPUC's EIR include, but not be limited to, the following issues:

Visual impacts of taller poles and increased number of transmission lines on nearby existing and future neighborhoods.

The proposed transmission line expansion for Routes 1, 2, and 3 will occur within portions of the existing SCE easement along the Road 148 alignment. Residential neighborhoods abut the west side of the existing SCE transmission route. Future mixed use neighborhoods, including single and multiple family homes, schools, parks, shopping and other mixed land uses, will be planned along the east side of the transmission route in areas currently designated on the City of Visalia General Plan as Urban Reserve. The

visual impacts of the transmission line expansion must be evaluated, particularly with respect to the view to the east toward the Sierra Nevada Mountain Range.

Impacts of power lines on future development along the SCE easement (i.e., planned future mixed use neighborhoods).

Expansion of power lines along the existing SCE easement will impact future development in the area. The EIR must address design techniques for compatibility, EMF buffering, safety, visual amelioration, and other design impacts for future development on both sides of the power line easement. This analysis must also include conjunctive use of the SCE easement, such as future developed park, trails, treescape, storm water facilities, of other uses that will blend in and complement an urban environment.

Impacts of power lines on nearby property values.

Expanded power line facilities within the existing SCE easement will cause future prospective home and property buyers concerns when considering purchases along the transmission corridor. Concerns will include, but not be limited to, visual impacts, power line "hum", fear of electro-magnetic fields, and safety issues. The impacts of the power line expansion upon property and home values along the easement must be quantified in the EIR and analyzed with respect to future effects upon these neighborhoods.

Economic impacts, including possible blight, occurring from potential reduced property values.

If property values are reduced due to the power line expansion project, neighborhoods may be impacted by reduced homeownership, increased rentals, lower quality development and other effects caused by lowering property values. Over time, these impacts may result in poor land use mix, reduced property maintenance and neighborhood blight. Blight is a serious physical, social, and economic impact. The potential for blight if property values are reduced due to the power line expansion project must be evaluated in the EIR.

Noise impacts from power line "hum" on adjacent properties/land uses.

Existing high voltage power lines within the SCE easement generate a substantial "hum". This noise may increase as a result of the increased number of transmission lines in the proposed project. Current and future residents along Routes 1, 2, and 3 may be disturbed by power line hum and their quality of life degraded. The impact of this noise effect upon neighborhood livability, desirability and property values must be evaluated in the EIR.

Impacts of electro-magnetic fields (EMFs) upon persons and animals in the vicinity of the proposed power lines.

EMFs are an ongoing concern to persons living near major power lines. The impacts of EMFs to humans and animals resulting from the project for all three routes must be fully disclosed in the EIR. Secondary effects upon neighborhood desirability and property values must also be fully evaluated.

Potential conjunctive uses for power line easement.

Power line easements have the potential to degrade urban neighborhoods if they are left as barren, unlandscaped corridors occupied by transmission poles and lines only. Conversely, these corridors can present opportunities if they are creatively and wisely managed to contain uses complement neighborhoods. These uses can include, but are not limited to, linear parks, pedestrian and bicycle trails, community gardens, urban forests, and other potential uses. The EIR should evaluate potential for conjunctive uses for all three proposed routes within the Visalia urban area.

Compatibility with future interchange at State Highway 198 and Road 148.

The City of Visalia is planning a future highway interchange at the juncture of Road 148 alignment and State Highway 198. This interchange will serve existing and future urban land uses and City residents in neighborhoods located east and west of Road 148, north and south of State Highway 198. The existing SCE power line easement is located along the Road 148 alignment. Transmission Loop Routes 1 & 2 will be affected by the future development of Road 148 to arterial status street (84'-110' right of way width, 4 lanes, some portions with raised medians and turn lanes) and the planned future interchange at State Highway 198. If Route 2 or 3 is selected for the SCE project, the design of the transmission facility must be compatible the with planned future highway interchange and street improvements.

Effects upon tourism if towers/lines are placed in the viewshed of the State Highway 198.

State Highway 198 is a major tourist entry route to the Southern Sierra Nevada Mountain Range, the Sequoia/Kings Canyon National Park, Mineral King, and several foothill and mountain communities. Transmission poles/towers and lines may be visible from State Highway 198 in Routes 1, 2, and 3. Highway 198 is designated as a Scenic Corridor in the Tulare County Scenic Highways Element. The EIR must analyze impacts the project will have on the Highway 198 Scenic Corridor, including any degradation of the corridor panorama and disruption of views of the mountain range from Visalia neighborhoods.

Project cost estimates.

Information on land acquisition and construction cost estimates for the various routes provided to date has been limited and details are lacking. It is difficult to evaluate the economic impact on ratepayers from implementation of the various routes. The EIR should include detailed costs estimates for each route to determine economic impacts to ratepayers.

Detailed evaluation of Alternative Route 4.

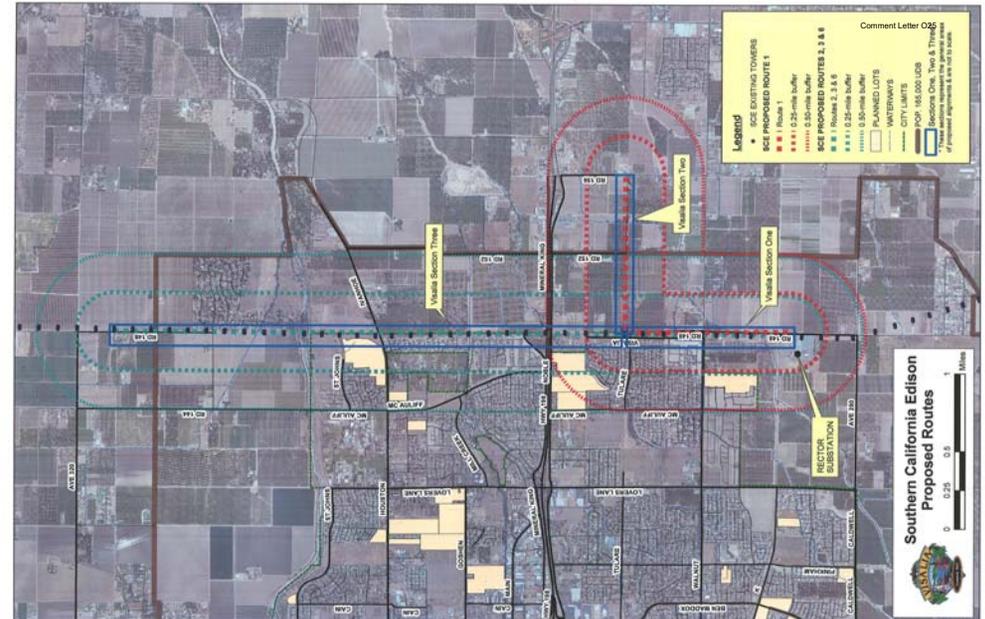
Information on Route 4 is very limited. It appears this route was dismissed early in the evaluation process by SCE without the opportunity for the public to adequately examine its potential environmental and system effects. SCE determined Route 4 is inadequate to achieve SCE's power objectives for this project, but how is the public able to affirm this conclusion when so little information and analysis about Route 4 has been provided? Further, Route 4 may have significant environmental issues or benefits, but given the lack of information, how is this able to be determined? The EIR must provide a thorough description, analysis, and environmental evaluation of Route 4 to determine its characteristics and environmental impacts in comparison to the other routes.

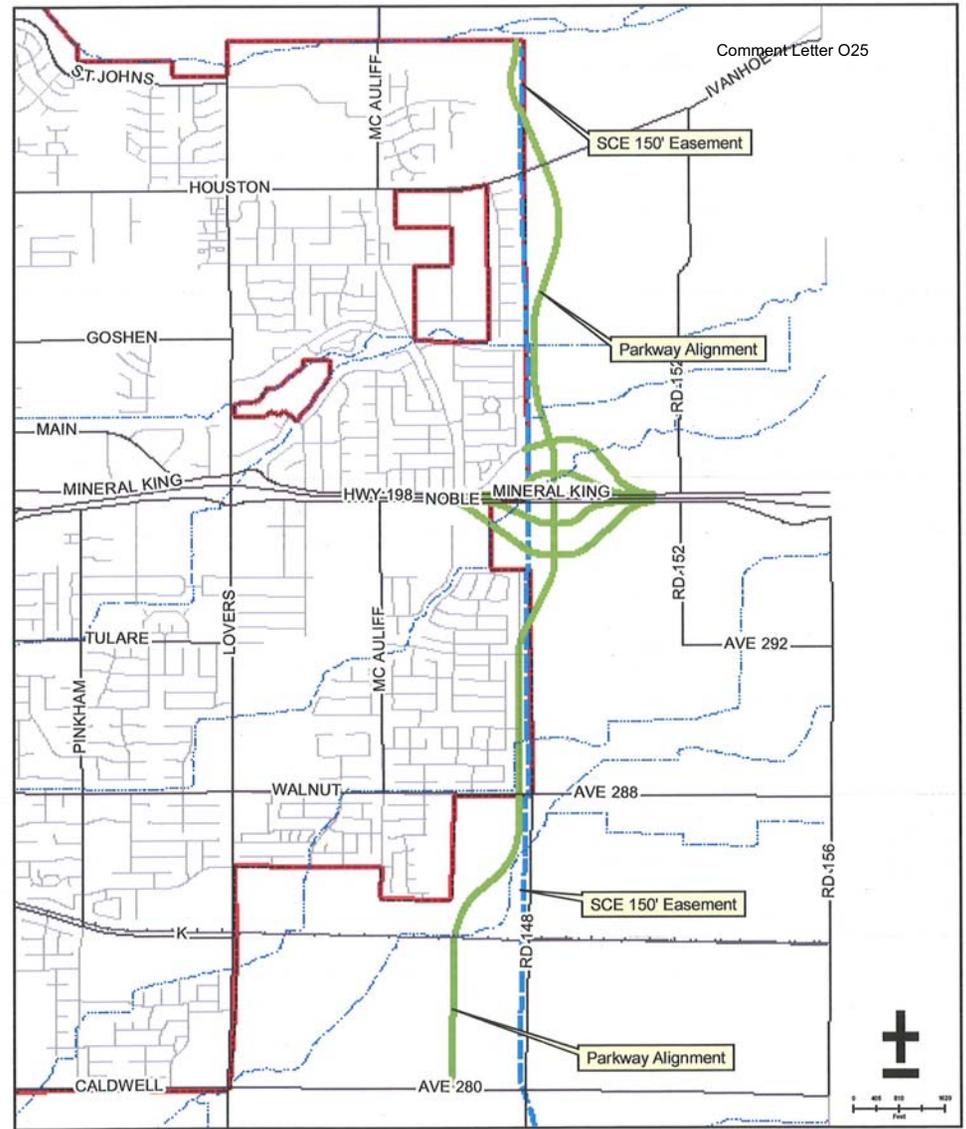
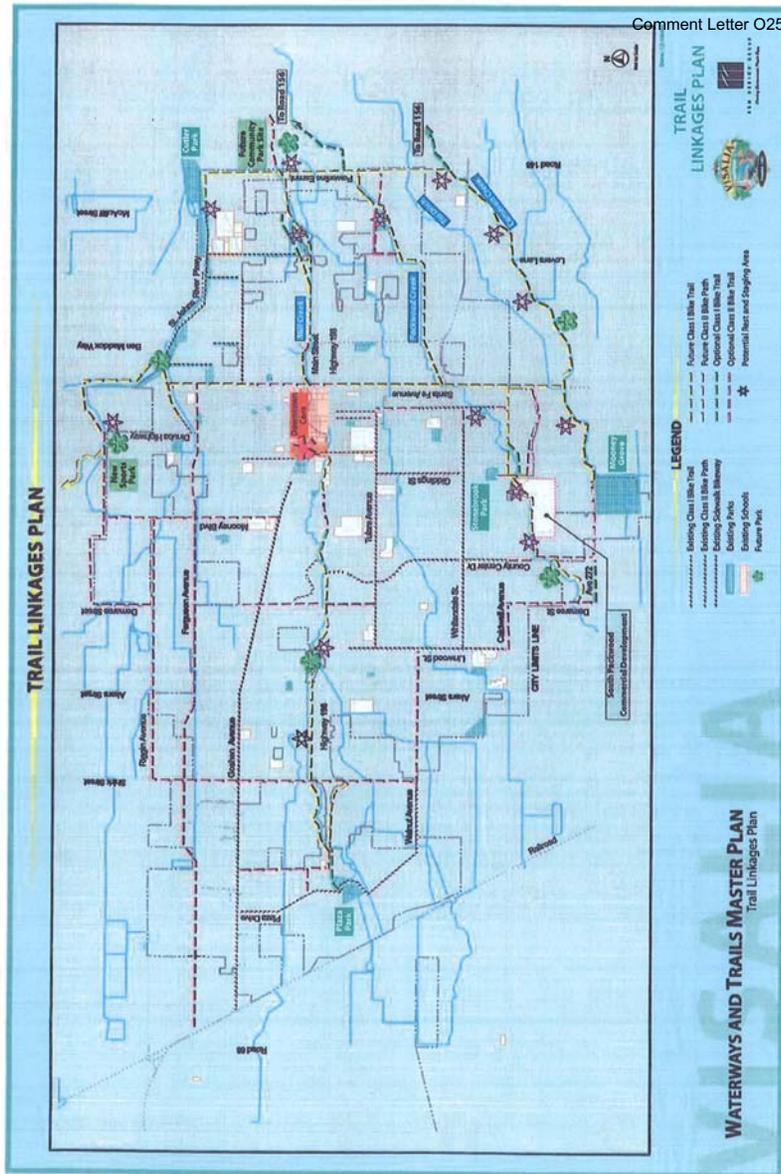
Again, the City of Visalia appreciates the opportunity to provide input as part of the CPUC's scoping process related to the San Joaquin Cross Valley Transmission Loop. We look forward to reviewing the draft EIR and providing further comments at that time.

Again, we thank you for your consideration in this matter.

Sincerely,

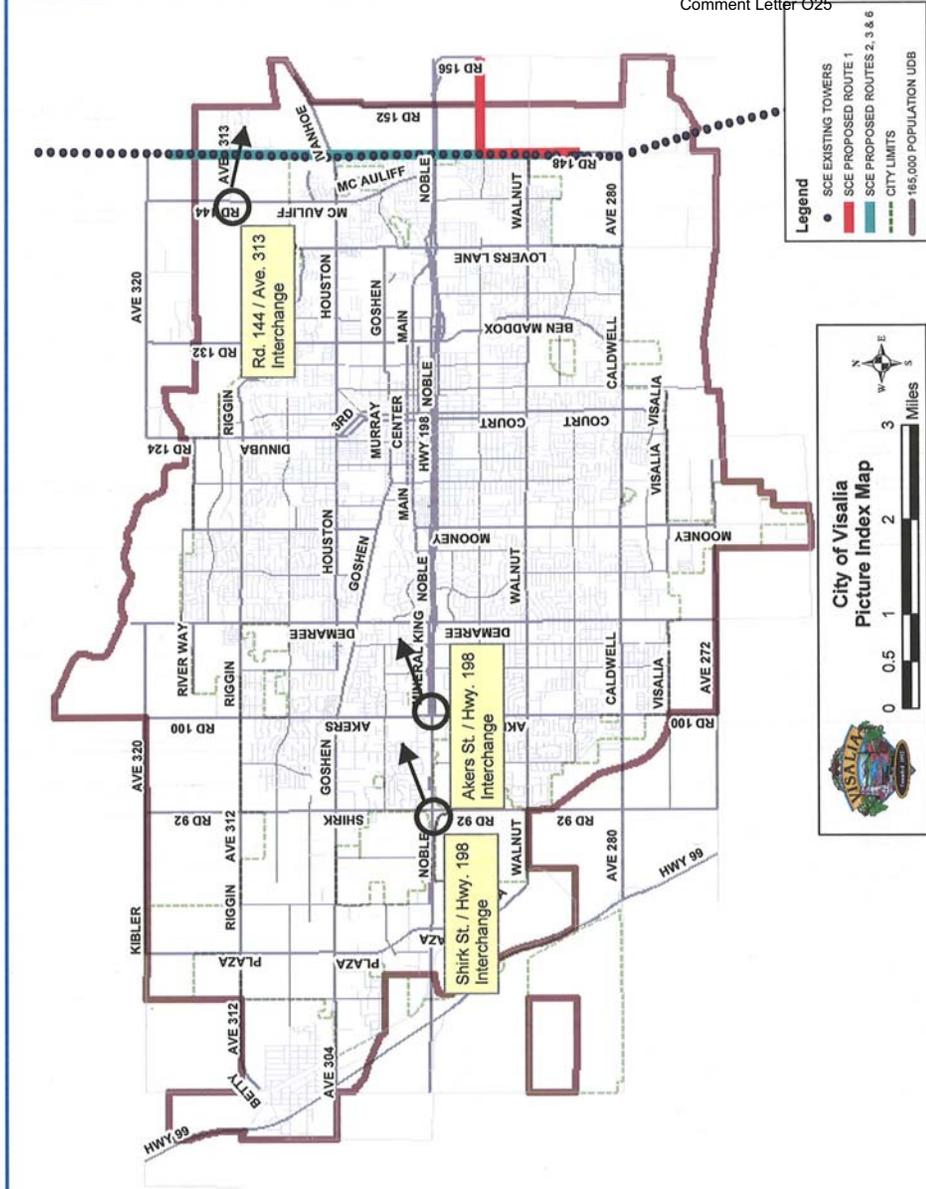
Jesus Gamboa, Mayor



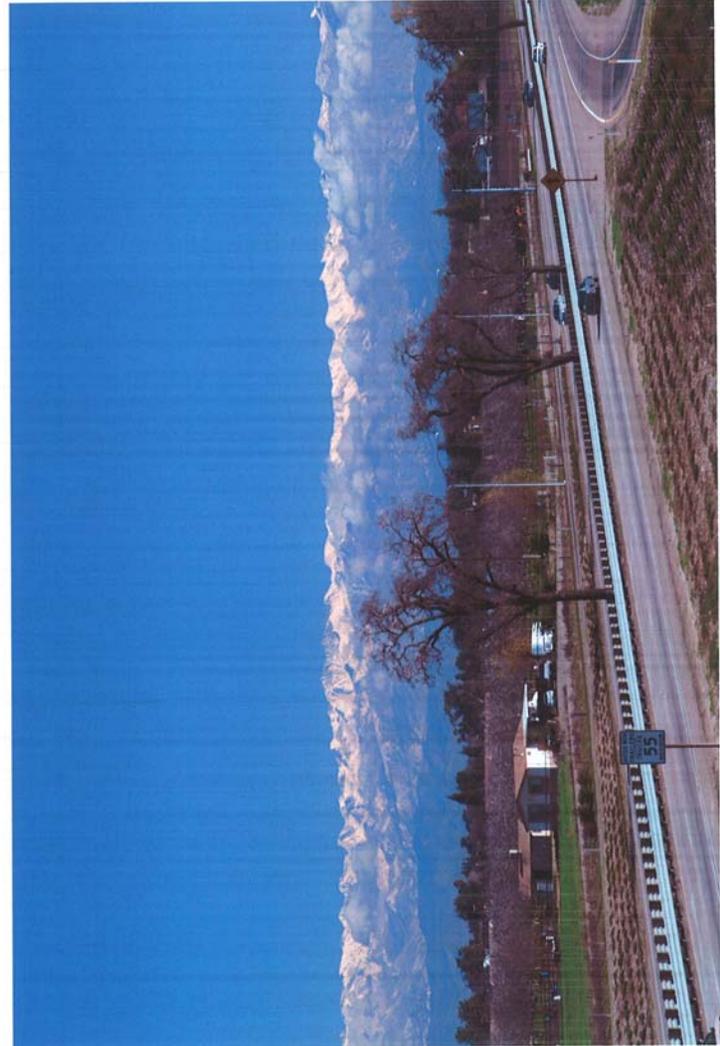


- STREETS
 - RAILROAD
 - WATERWAYS
 - CITY LIMITS
- 

Comment Letter O25

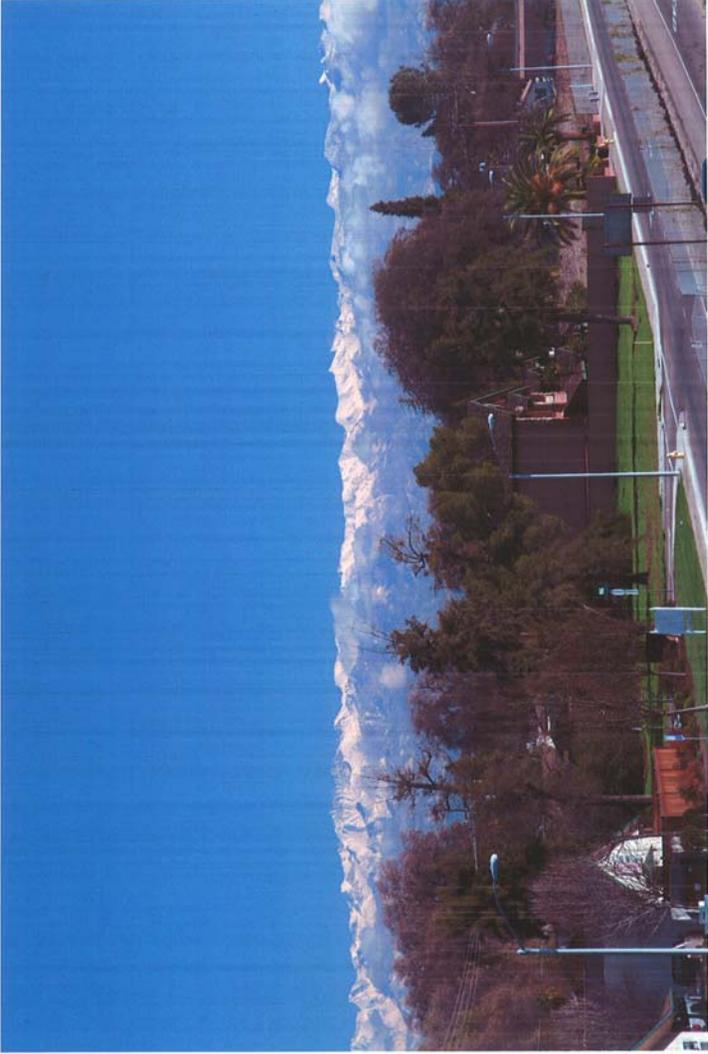


Comment Letter O25



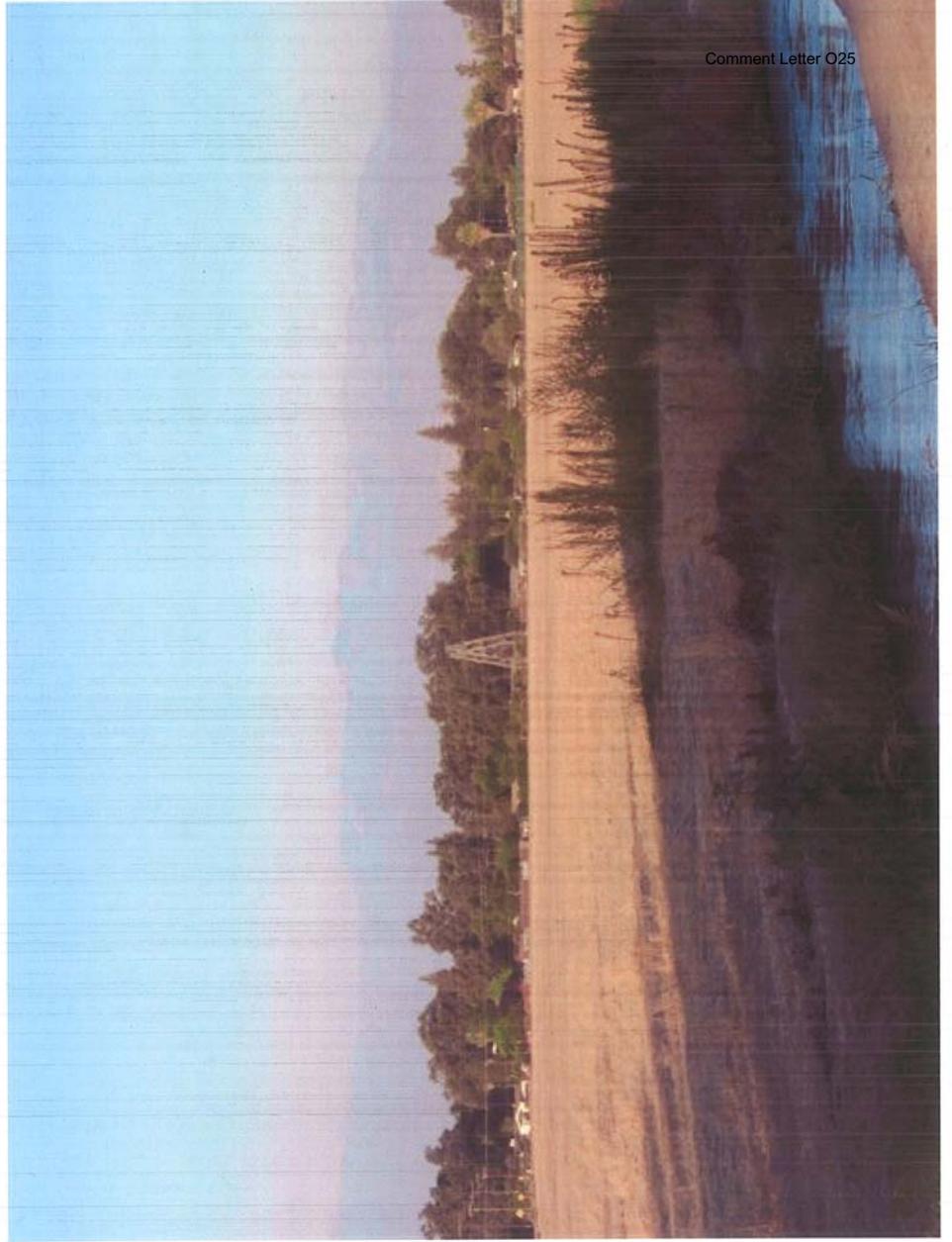
View from Shirk Street / Highway 198 Interchange

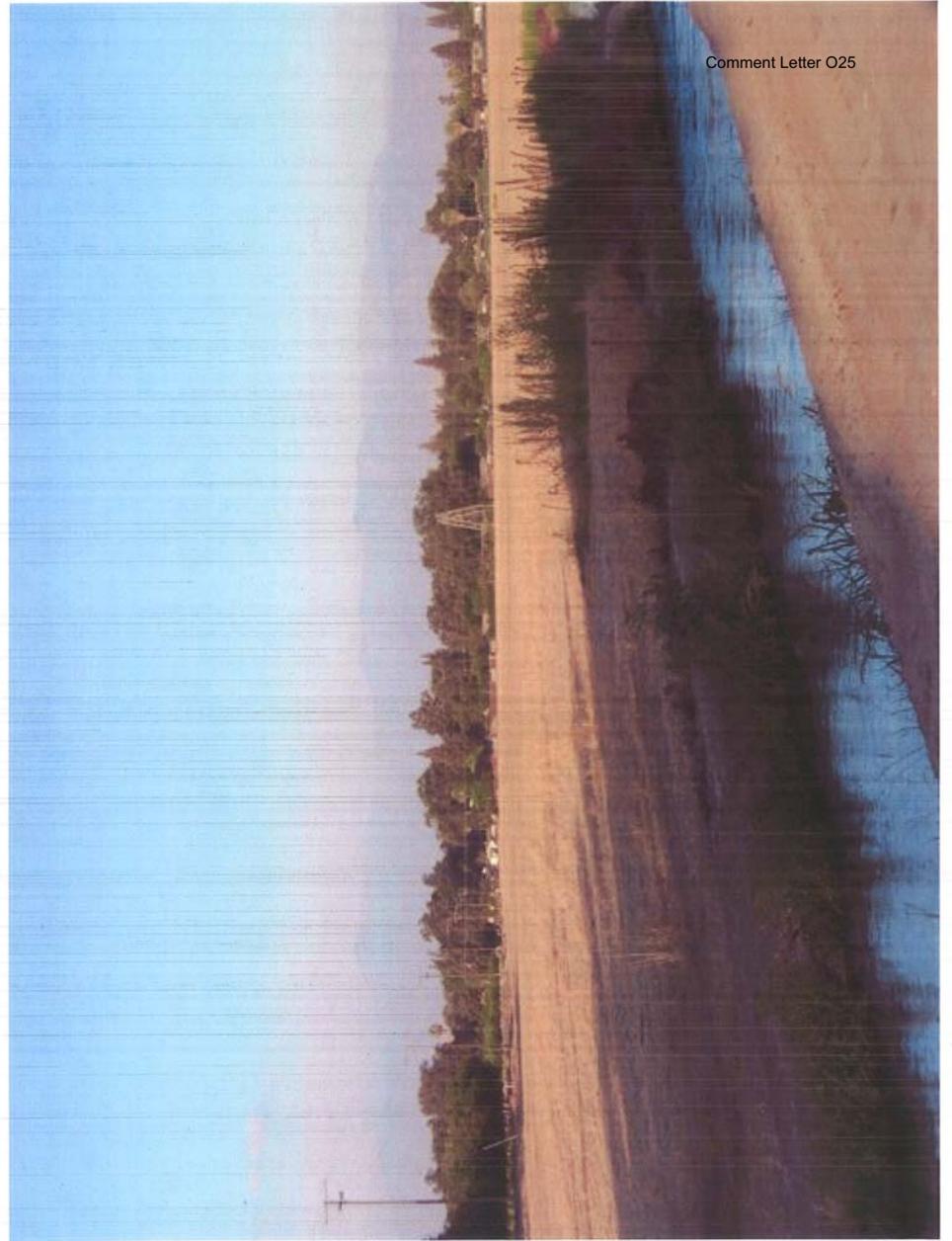
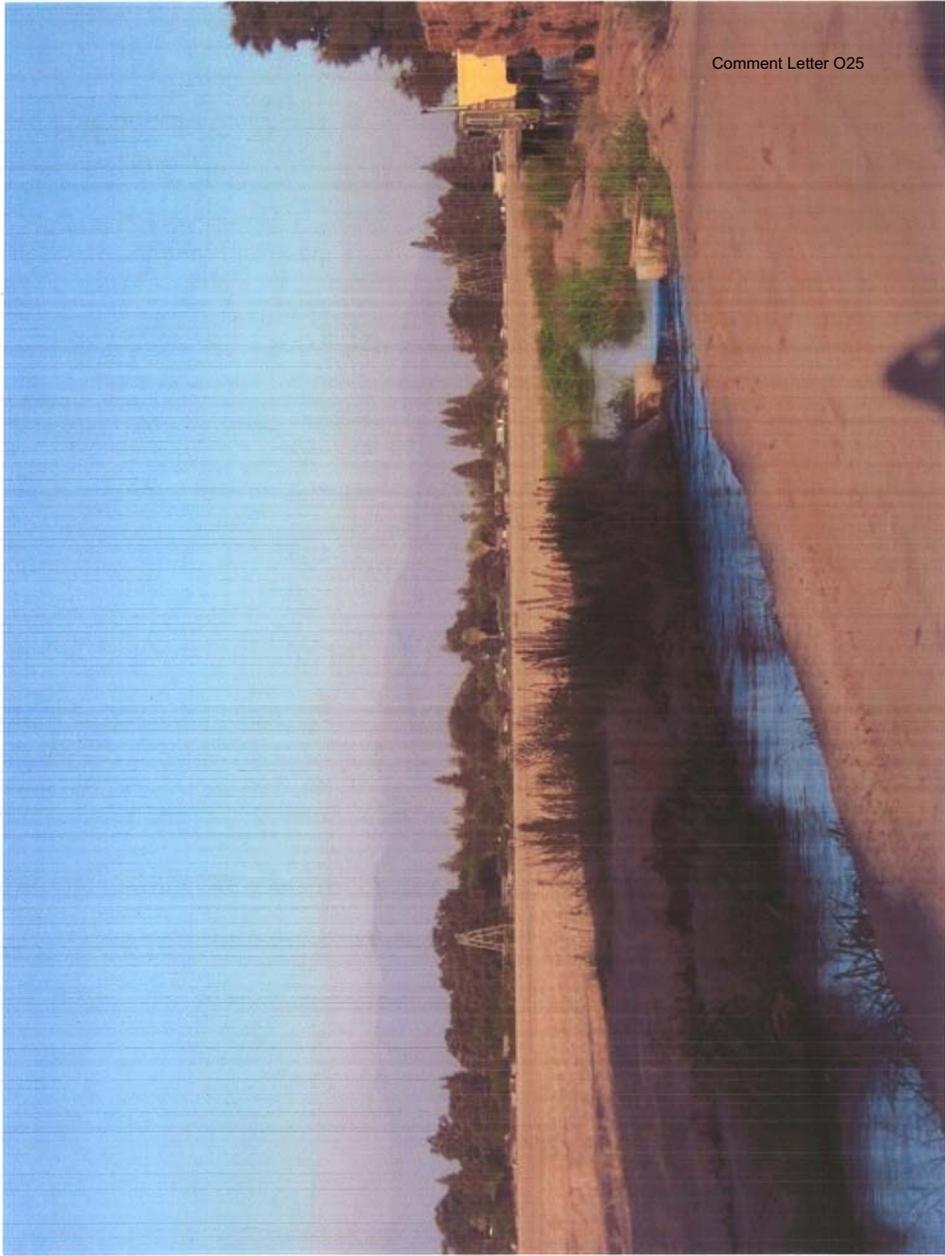
Comment Letter O25



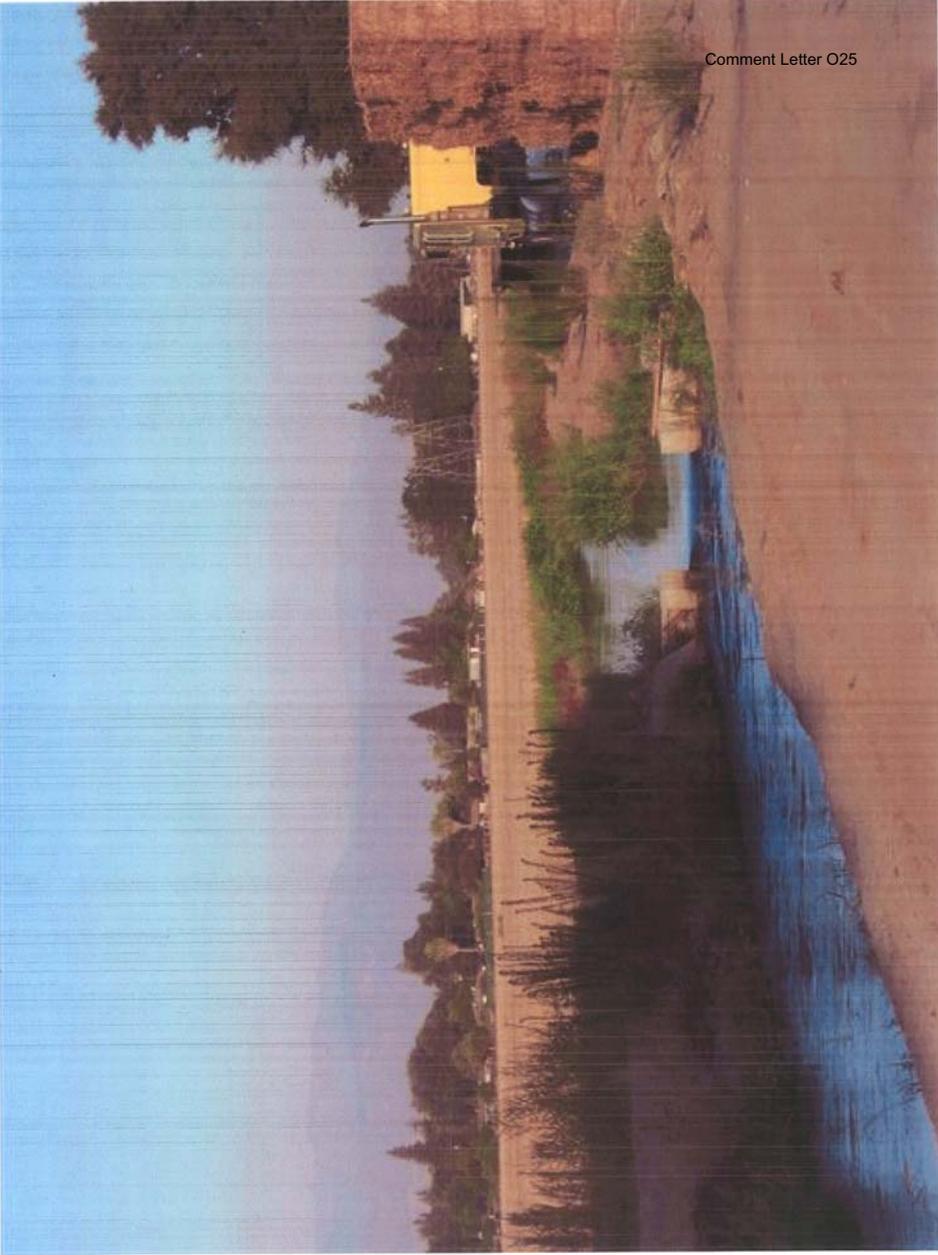
View from Akers Street / Highway 198 Interchange

Comment Letter O25





Comment Letter O25



Comment Letter O25

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity for the San Joaquin Cross Valley Loop Transmission Project.

Application No. 0805039
(Filed May 30, 2008)

**PREPARED DIRECT TESTIMONY OF MICHAEL OLMOS
ON BEHALF OF
THE CITY OF VISALIA**

**PREPARED DIRECT TESTIMONY OF MICHAEL OLMOS
ON BEHALF OF
THE CITY OF VISALIA**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Question 1: What is your name and position, how long have you held your position, and what is your background and expertise?

Answer: Michael Olmos. I have been with the City of Visalia since 2001. I am the current Assistant City Manager. In this position, in addition to assisting the City Manager with specific projects, I also directly oversee the Community Development Department, as well as overseeing the work of the Public Works Department head, and the Housing and Economic Department head. These are all the areas of the city government having to do with development of the City, and with the management of the City's Public Work systems and assets. I've held the Assistant City Manager position for approximately the past four years. Prior to that, I was the Community Development Director, and before that I was City Planner. Prior to coming to the City of Visalia, I worked for the City of Reedley as the Community Development Director from 1990 to 2001, responsible for planning, building, engineering, and all Public Works field operations. From 1987 to 1990, I was employed as a regional planner for the County of Tulare.

I have a bachelors degree in economics from California State University, Fresno, and am a member of the American Institute of Certified Planners.

Question 2: What is Visalia's population and its growth rate?

Answer: The City's latest population has been estimated to be 123,000. We have grown at an average rate of 3.2% over the past 10 years.

Question 3: Describe the community values that characterize the City of Visalia and that inform its planning efforts.

Answer: Visalia's small town characteristics, along with its natural and rural features, such as its waterways, Valley Oaks and its rich agriculture heritage, combine to offer a high degree of livability and level of community amenity not present in most California communities. Visalia's scenic qualities are well known, ranging from its rivers, to its views of the nearby foothills and the Sierra Nevada range. The City has a strong connection with these mountains and the Sequoia and Kings Canyon National Parks, in particular. Visalia is known as

1 the Gateway to the Sequoias and recently started California's first Valley-to-Mountains National
 2 Park Shuttle. The City's numerous scenic vistas and the scenic corridor along SR 198 have
 3 contributed to Visalia's unique image particularly as a "non-Highway 99" Valley-town.

4 The City prides itself on providing a clean, safe and livable community for its residents.
 5 Visalia offers a high quality of life which is derived from its attractive, small town ambience,
 6 characterized by its well-established downtown, Main Street, and its historic and highly livable
 7 residential neighborhoods. The City seeks to maintain and enhance this lifestyle for Visalia's
 8 residents by ensuring that: 1) Visalia's downtown and residential neighborhoods are safe, well-
 9 connected and attractive; 2) future development within the City's planning area is orderly,
 10 contiguous and concentric; 3) agricultural land is protected from premature urban development;
 11 4) Visalia's well established parks and network of trails are preserved and enhanced; and 5)
 12 development projects do not detract from the City's overall character and ambience as defined
 13 primarily by its agricultural lands and its unique scenic vistas.

14 **Question 3A:** Are these values embodied in any City plans or documents?

15 **Answer:** Yes, the City's General Plan extensively documents Visalia's community
 16 values. One objective of the General Plan update process in 1991 was to record a perceived
 17 community value system for the City; in other words, how Visalia "looks and feels." These
 18 community values served as the basis for many of the General Plan's goals, objectives, and
 19 implementing policies. By identifying community values and translating them into policy
 20 statements, the General Plan plays a central role in preserving Visalia's important community
 21 characteristics.

22 Some of the most important objectives, goals and policies which reflect Visalia's
 23 community values include the following:

24 **Provisions Pertaining to Orderly Growth and Preservation of Agricultural**
 25 **Resources:**

- 26 • Goal 6: *Manage planning area growth to be contiguous and concentric from the*
 27 *City's Core area.* (Land Use Element at 1-25).

- 1 • Objective B: *Minimize urban sprawl and leap-frog development by encouraging*
 2 *compact, concentric and contiguous growth.* (Land Use Element at 1-25).
- 3 • Objective C: *Encourage development of comprehensive planned, compact, well-*
 4 *integrated areas for residential development.* (Land Use Element at 1-22).
- 5 • Objective A: *Protect agricultural land from premature urban development.* (Land
 6 Use Element at 1-25).

7
 8 **Provisions Pertaining to Protection of the City's Unique Scenic Resources:**

- 9 • Objective A: *Maintain and enhance Visalia's physical diversity, visual qualities*
 10 *and small-town characteristics.* (Land Use Element at 1-18 and 3-2).
- 11 • Policy 1.1.18: *Develop scenic corridor and gateway guidelines that will maintain*
 12 *the agricultural character of Visalia at its urban fringe.* (Land Use Element at 3-5).
- 13 • Policy 2.1.5: *Develop an East Highway 198 Specific Plan for the east end of*
 14 *Highway 198 to enhance the scenic quality of the east entrance and corridor and balance the*
 15 *scenic qualities on both ends of Highway 198.* (Land Use Element at 3-6).

16
 17 **Provisions Pertaining to Incompatible Land Uses:**

- 18 • Policy 1.1.16: *Minimize visual impact of development through various design*
 19 *techniques such as building orientation, landscaping depth and density.* (Land Use Element at
 20 3-5).
- 21 • Policy 4.1.6: *Develop design measures to buffer residential development from*
 22 *non-residential land uses. These measures should, at a minimum, include setbacks, and...*
 23 *landscaping.* (Land Use Element at 3-27).

24
 25 **Provisions of Visalia General Plan Pertaining to Open Space and Parks Lands:**

- 26 • Goal 3: *Develop a high quality public park system which provides adequate space*
 27 *and facilities for varied recreational opportunities which are conveniently accessible to all*
 28 *Visalia residents.* (Conservation, Open Space, Recreation and Parks Element at 6).

- 1 • Objective: *Create and maintain open space for public health and safety in areas*
2 *which require special management or regulation.* (Conservation, Open Space, Recreation and
3 Parks Element at 6).
 - 4 • Objective: *Acquire adequate park sites for future City growth.* (Conservation,
5 Open Space, Recreation and Parks Element at 6).
 - 6 • Objective: *Maximize opportunity for joint use of public land and facilities such as*
7 *schools, stormwater ponding basins and other recreation areas under public jurisdiction*
8 *suitable for recreation.* (Conservation, Open Space, Recreation and Parks Element at 6).
 - 9 • Objective: *Utilize ordinances, easements, restrictive covenants and other tools to*
10 *negotiate with landowners and developers to ensure that significant natural resources and open*
11 *space are protected during development.* (Conservation, Open Space, Recreation and Parks
12 Element at 6).
 - 13 • Implementing Policy 3.3-1: *Encourage cooperative agreements with the City and*
14 *[other agencies], Southern California Edison Company and other public agencies and utilities*
15 *to explore innovative recreation and open space facilities throughout the Visalia planning*
16 *area.* (Conservation, Open Space, Recreation and Parks Element at 64).
 - 17 • Objective: *Preserve and protect agricultural use on lands in and surrounding the*
18 *Visalia planning are for open space purposes and for the managed production of*
19 *resources.* (Conservation, Open Space, Recreation and Parks Element at 6).
- 20 **Question 4:** Would the proposed transmission line Project, or any of the alternative
21 transmission line routes, affect the values you identified above?
- 22 **Answer:** Yes, though some more than others. Portions of the Proposed Project and
23 Alternative Routes 2, 3 and 6 are located within Visalia’s city limits, as well as within Visalia’s
24 adopted Urban Development Boundary and Urban Area Boundary. Future mixed use
25 neighborhoods, including single and multi family homes, schools, parks, shopping and other
26 land uses are planned along the east side of the Proposed Project alignment and each of the
27 alternative transmission line routes in areas currently designated in the Visalia General Plan as
28 Urban Reserve.

1 It is easiest to discuss the anticipated effects of the Proposed Project as well as the Project
2 Alternatives in terms of the various sections of the routes that are involved. The first section of
3 the route that would cause impacts to the City of Visalia, which I’ll refer to as “Visalia Section
4 One”, runs from the Rector Substation northward to the Tulare Avenue alignment. (See Exhibit
5 A, Southern California Edison Proposed Routes). In Section One, the Proposed Project and the
6 Project Alternatives are all the same: the existing pairs of 60-foot towers, each carrying three
7 transmission lines for a total of six lines, would be replaced with pairs of 120- to 160-foot
8 towers, carrying six lines each for a total of twelve lines, all to be constructed within the existing
9 right of way.

10 The second section (“Visalia Section Two”), which would only be at issue if the
11 Proposed Project (also referred to as “Alternative 1”), is selected, runs eastward from the north
12 end of Section One straight east to Avenue 152 (the eastern boundary of the City of Visalia’s
13 planning area, a boundary known as the Urban Development Boundary, or “165,000 Population
14 Target Boundary”). In Section Two, a new set of 120- to 160-foot mono pole towers with six
15 lines would be located in a newly created right of way. The last section (“Visalia Section
16 Three”) is common to Alternatives 2, 3, and 6. It runs north from the end of Section One
17 approximately three miles to the Avenue 316 alignment, which is also the northern limit of the
18 City’s Urban Development Boundary.

19 **Question 4A:** Would the community’s widely held value of maintaining scenic corridors
20 and opportunities for aesthetically valuable viewsheds be affected by the Project or any of the
21 alternatives?

22 **Answer:** Yes, the changes to the community’s views could be severe in each of the
23 Visalia Sections and, unless specific measures are incorporated into the Project design, all of the
24 transmission routes, including the DEIR’s designated environmentally superior alternative,
25 would not be feasible from the City’s perspective.

26 As the attached photos clearly show, Visalia’s identity is profoundly linked to the
27 stunning Sierra Nevada Range since the mountains and foothills are dominant features from the
28 eastern portions of the City. (See Exhibit B which depicts views from the intersections of

1 Highway 198/Akers Street and Highway 198/Shirk Street looking northeast). The obstruction
 2 of these views of the Sierra Nevada Range could substantially affect Visalia's community
 3 image. Moreover, interference with viewsheds would be in direct contrast to the City's General
 4 Plan objective calling for the City's visual qualities to be maintained and enhanced. (See
 5 Objective A, Land Use Element at 3-2).

6 In Visalia Section One (all routes), the visual impacts are associated with: (i) increasing
 7 the tower height from the existing 60 feet to 120-160 feet, (ii) increasing the number of lines that
 8 create visual obstruction from six to twelve, and (iii) changing the current configuration in
 9 which all of the lines are horizontally configured across the top of the tower to a configuration in
 10 which there are four wires each going horizontally across at three different heights. The
 11 dramatic effect that would accompany the new lines cannot be sufficiently emphasized. The
 12 current SCE lines are at about tree height, so the lines are not as noticeable because they tend to
 13 blend in with the trees (note that Visalia has been a Tree City, USA for more than 20 years so
 14 the City has a lot of trees).¹ As a point of reference, the streetlight poles and the utility lines in
 15 the foreground of the Akers Street photograph are approximately 25 feet and 35 feet tall,
 16 respectively.

17 The new poles and lines would be about two and one-half times as tall as the existing
 18 structures. Consequently, the new lines would tower above the trees and create a stark
 19 obstruction against the distant views of the mountains. Without the trees to soften the effects of
 20 the lines, the substantial increase in structure height and the increased stature of these unnatural
 21 geometric forms and straight lines would create an alarming increase in industrial character
 22 juxtaposed against the Sierra Nevada Mountain Range and the foothills.

23
 24
 25 ¹. Tree City USA is a tree planting and tree care program sponsored by The National Arbor Day
 26 Foundation for cities and towns in the United States. To qualify for Tree City USA, a town or
 27 city must meet four standards established by The National Arbor Day Foundation and the
 28 National Association of State Foresters.

1 Future residents would also be affected given the City's plans to continue its
 2 development east of the proposed transmission line right of way. As shown on Exhibit A
 3 (which depicts the ¼ and ½ mile buffers), I estimate that in the area of Visalia Section One,
 4 approximately 500 existing homes with existing obstructed views of the Sierra Nevada range
 5 will experience an increase in intensity of the obstruction, while approximately 850 existing
 6 homes that do not currently experience any visual obstructions will experience such an
 7 obstruction after completion of the Project due to the increased height of the poles and the lines.
 8 These numbers are based on assumptions that the existing towers and lines are visible from a
 9 distance of ¼ mile, while the planned towers and lines will be visible from a distance of ½ mile.

10 The same impacts would apply to Visalia Section Three (common to all of the
 11 alternatives). I estimate that in the area of Visalia Section Three, approximately 1,000 existing
 12 homes that have obstructed views as a result of the existing SCE transmission lines will
 13 experience an increase in intensity of the obstruction, while approximately 2,000 existing homes
 14 that do not currently experience visual obstructions will experience such an obstruction due to
 15 the increased height of the transmission lines. Donald Lawrence Company, a local land use
 16 developer, is in the process of constructing the River Run Ranch development— a portion of
 17 which is currently under construction, with plans for future construction. This major
 18 development would be impacted by Alternative Routes, 2, 3 and 6. The visual obstructions will
 19 also be experienced in the areas adjacent to Visalia Section Two (unique to Route 1, the
 20 Proposed Project). These would be new impacts, as opposed to increased impacts.

21 It should be noted that the effects in this regard will be different depending on the
 22 alternative selected. Specifically, the visual impairment noted above with regard to Section
 23 Two (the Proposed Project) will be felt by residents of Visalia's future planning area since there
 24 is currently no urban development in this location. This may provide the City with an
 25 opportunity to attempt to plan around these obstructions (e.g., with appropriate site design,
 26 homes may be situated on lots so that their primary view faces away from electrical
 27 infrastructure). On the other hand, Visalia Sections One and Three will affect current as well as
 28 future development, making the impacts harder to rectify. It is important to note that the only

1 alignment that would not adversely affect scenic vistas of the Sierra Nevada Mountain Range
2 within Visalia Section Three is the proposed Project.

3 **Question 4:** Would the Project or any of the alternatives present new challenges to the
4 community's values related to maintaining neighborhood continuity and orderly planned
5 development of the City?

6 **Answer:** Yes, to varying degrees depending on the Sections at issue.

7 Regarding Visalia Section Two (unique to the Proposed Project) the new transmission
8 line corridor would create a significant obstacle to Visalia's planned expansion of the City. As
9 discussed above, Visalia's Urban Development Boundary extends east of the City and
10 consequently, the City is planning on developing these lands with a variety of uses, including
11 housing. The construction of a new utility corridor – and a stark no-man's-land under the lines --
12 would have a pervasive influence on the emerging community. However, if the Project were
13 redefined to include an aesthetically pleasing landscaped pathway (as discussed further below),
14 the right of way would be a compatible use that would provide significant, offsetting benefits to
15 the community.

16 Regarding Visalia Section Three, the increased intensity of use of the existing right of
17 way would substantially interfere with other important planned City improvement projects. As
18 Exhibit C shows, the Visalia Parkway is proposed to be constructed immediately east of, and
19 parallel to, the existing SCE right of way until it crosses the right of way just south of St. John's
20 Parkway and then continues northward on the west side of, and parallel to, the right of way until
21 it reaches St. John's River. The Visalia Parkway would be a four-lane arterial with a grade
22 separated interchange with Highway 198. The proximity of this major roadway project to the
23 SCE right of way (Alternative Routes 2, 3 and 6) would complicate the construction, design and
24 operation of the Parkway's intersections with Highway 198, Walnut Avenue, Tulare Avenue,
25 Noble Avenue, Mineral King Avenue and Houston Avenue.

26 The City is also planning to develop a regional sports park on a City-owned 100-acre
27 parcel, located between the existing SCE transmission lines and Avenue 152, just north of
28 Mineral King Avenue. (See Exhibit D, City of Visalia Trail Linkages Plan). While this land is

1 currently adjacent to SCE transmission lines, the increased intensity of use, in particular the
2 visible increase in industrial character of this location, would complicate the development of this
3 sports park and potentially interfere with the community's use and enjoyment of this park
4 setting. However if the proposed Project were redefined to include a landscaped pathway within
5 the proposed right of way, such a pathway would enhance public access to the new regional
6 park.

7 Moreover, utility line corridors can become an eyesore, an unused no-man's-land. While
8 some property owners who own the fee interest in the property underlying the transmission lines
9 maintain these corridors by removing unattractive weeds, scrub brush and litter, such upkeep
10 and maintenance tends to be sporadic. Additionally, if the right of way is not landscaped and
11 integrated into the community, it can negatively affect the property values of adjacent and
12 nearby parcels. This impact can reduce neighborhood desirability, increase vacancies and
13 rentals, and eventually cause further neighborhood deterioration and blight.

14 **Question 5:** There are transmission lines already running along a portion of the
15 Proposed Project route and along all of the alternate routes. What specific considerations make
16 the San Joaquin Cross Valley Loop Transmission Project infeasible from the City's point of
17 view?

18 **Answer:** The new lines and towers would definitely have economic, and social
19 impacts on our community, as identified in the responses to Questions 4, 4A, and 4B. In
20 addition, developers would be less inclined to build close to the lines, potentially leaving a large
21 swath of vacant land in the middle of future neighborhoods. Our experience has shown that, all
22 things being equal, areas adjacent to power lines will develop later than other vacant lands.
23 Development may eventually occur in these areas, but before this happens, the land is subject to
24 being left vacant. Thus, the City's careful plans for growth, which have been developed over
25 the course of years of planning, could be thwarted. Also, placing *any* new above-ground lines
26 runs counter to the goals and values of the community. The City has been working for years to
27 underground its existing utility lines. Constructing the tall, new towers and lines proposed for
28 the Project takes the City in the exact wrong direction. It will make the SCE corridor more

1 imposing and cause trepidation for residents in the vicinity. The corridor will become a greater
 2 obstacle as the City plans for future development of this area

3 **Question 6A:** Are there specific measures that could provide benefits to ameliorate the
 4 above described impacts of the Proposed Project and alternatives?

5 **Answer:** There are features which could be added to the Project or any of its
 6 alternative alignments that would offset the Project's effects on the Visalia community. First,
 7 the Project could be revised to include a secondary, conjunctive use such as the development of
 8 a landscaped walking and/or bicycle pathway. Linear open spaces or linear parks associated
 9 with utility corridors such as this offer an ideal configuration for such trails, thus offsetting the
 10 tendency for the transmission line corridor to become a wasteland with its associated adverse
 11 effects on community character and ambience. Moreover, a landscaped trail or pathway would
 12 integrate the transmission line corridor into the City's overall growth plan and help to promote
 13 critical connections between the City's existing and its planned network of trails and parks.
 14 Specifically, a pathway or trailway along the transmission line corridor for Alternative Routes 2,
 15 3 or 6 would connect with the St. Johns River Trail and Mill Creek Trail and provide direct
 16 access to Cutler Park, the new sports park as well as the future community park site near the
 17 existing SCE transmission lines, north of Mineral King. (See Exhibit D, City of Visalia Trail
 18 Linkages Plan). By providing these important connections, the transmission line corridor along
 19 Alternative Routes 2, 3 and 6 would serve to integrate the right of way into the community's
 20 overall urban structure.

21 In consultation with the CPUC, SCE, the City and landowners along the transmission line
 22 right of way should develop a public-private secondary use plan for the transmission corridor.
 23 Such a secondary use plan would include the following features: 1) dedication of a public open
 24 space easement to the City that guarantees permanent public access; and 2) SCE contribution
 25 toward public facilities (such as walking/bicycling path or trail, landscaping and benches) for
 26 those segments of the corridor within Visalia city limits and its Urban Development Boundary.

27 Second, various visual relief measures could be included in the Proposed Project to offset
 28 the visual obstruction of the Project's significant structures. To this end, SCE should develop --

1 in consultation with a visual specialist designated by the CPUC -- a Visual Relief Plan. This
 2 Plan would be developed in coordination with the City and submitted to the CPUC for review
 3 and approval. The Plan would include the following measures:

4 **Structure Surface Treatment Plan**

5 For all structures that are visible from sensitive viewing locations within the City's
 6 existing and planned development areas (e.g., substation, towers and polls), surface coatings
 7 would be applied with appropriate colors, finishes, and textures to most effectively blend the
 8 structures with the visible backdrop landscape. At locations where a lattice steel tower or a
 9 tubular steel pole would be silhouetted against the skyline, non-reflective, light-gray colors
 10 should be selected to blend with the sky. The transmission line conductors should be non-
 11 specular and non-reflective, and the insulators should be non-reflective and non-refractive.

12 **Evergreen Screen**

13 SCE should establish a permanent evergreen vegetative screen of sufficient height for
 14 immediate visual screening around the Rector Substation and should provide a permanent drip
 15 irrigation system for plant survival.

16 **Match Structure Spacing and Spans**

17 In locations designated by the CPUC, in consultation with the City, SCE should match
 18 existing structure spacing and spans as closely as possible to avoid or reduce the number of off-
 19 setting tower placements, which would reduce visual complexity as seen from sensitive receptor
 20 locations. All new spans should match existing conductor spans as closely as possible in order
 21 to avoid or reduce the occurrence of unnecessary visual complexity associated with
 22 asynchronous conductor spans.

23 Third, undergrounding certain portions of the Project would offset the impacts related to
 24 the interference with the planned Visalia Parkway. Specifically, undergrounding the areas in the
 25 vicinity of the major arterial intersections described in Answer 4B would resolve those issues in
 26 those specific areas.

27 The combination of all of these measures would go a long way toward making the
 28 Project, whether it be Alternative 1, 2, 3 or 6, feasible from the City's perspective.

1 **Question 6B:** Does the City have any specific, written goals regarding the proposals
2 described above?

3 **Answer:** Yes, in addition to the General Plan goals, objectives and policies
4 discussed above in response to Question 3A, the following General Plan provisions support
5 these proposals:

- 6 • Implementing Policy 1.1.4: *It is a priority to work with utility companies to*
7 *landscape power line rights-of-way and to underground utilities where possible.*
8 *(Land Use Element at 3-3); and*
- 9 • Implementing Policy 1.1.5: *Develop land use and site design measures for areas*
10 *adjacent to high-voltage power facilities. (Land Use Element at 3-3).*

11 Other General Plan policies recommend developing measures to ensure the compatibility
12 of land uses. While these policies do not specifically call out utilities, they are nonetheless
13 intended to ensure that the visual consequences of all aspects of development are properly
14 designed, oriented or landscaped to maintain the visual integrity and overall character of the
15 City. These policies include:

- 16 • Policy 1.1.16: *Minimize visual impact of development through various design*
17 *techniques such as building orientation, and landscaping depth and density.*
18 *(Land Use Element at 3-5).*
- 19 • Policy 4.1.6: *Develop design measures to buffer residential development from*
20 *non-residential land uses. These measures should include setbacks and*
21 *landscaping. (Land Use Element at 3-27).*

22 These and other General Plan policies make clear that there are practical ways to ensure
23 that uses such as utility lines are constructed so as to minimize impacts to an existing
24 community's character and ambience.

25 **Question 7:** Aren't all of the impacts from transmission lines outweighed by the need
26 for reliable and safe electric transmission in the City?

27 **Answer:** A safe and reliable power supply is certainly necessary, but there is no need
28 to compromise the visual beauty and integrated planning of our community in order to facilitate

1 electrical transmission. The specific measures discussed above, if incorporated into any one of
2 the alternatives being considered for the Proposed Project, would provide important economic
3 and social benefits that would serve to lessen the Project's deleterious effects on the Visalia
4 community.

5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Lower Silver Creek Trail, North – Photo Gallery

[Return to Lower Silver Creek Trail, North](#)

[Return to Trails Home Page](#)

Dobern Bridge



From Bambi Lane - Before

From Bambi Lane - *After!*



Toward Bambi Lane - Before

Toward Bambi Lane - *After!*



From Dobern Ave - Before

From Dobern Ave - *After!*

Wenlock Drive Pedestrian Corridor



Along Wenlock Drive - Before



Along Wenlock Drive - *After!*

Comment Letter O25



From Dumont Circle - Before

From Dumont Circle - *After!*



...more after

...more after



...more after

... and even more after

Comment Letter O25

Lausett Ave Bridge



Lausett Ave Bridge - Before

Lausett Ave Bridge - *After!*



From Lausett Ave - Before

From Lausett Ave - *After!*

Kammerer Avenue Bridge



Trail through Capitol Park



[Return to Lower Silver Creek Trail, North](#)

[Return to Trails Home Page](#)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity for the San Joaquin Cross Valley Loop Transmission Project.

Application No. 0805039
(Filed May 30, 2008)

PREPARED DIRECT TESTIMONY OF DONALD FULBRIGHT
ON BEHALF OF
THE CITY OF VISALIA

**PREPARED DIRECT TESTIMONY OF DONALD FULBRIGHT
ON BEHALF OF
THE CITY OF VISALIA**

Question 1: What is your name, background and experience?

Answer: Donald Fulbright. I have been a real estate developer/builder in the Visalia area since 1975. I have completed developments in five different cities, all in the proximity of Visalia. I have built more than 3,000 homes in my career.

Question 2: Do you own property that will be affected by the proposed Southern California Edison San Joaquin Cross Valley Loop Transmission project?

Answer: I have developments in Visalia and in Farmersville, both of which could be affected by the project depending on which route is selected. The most direct impact will be in Visalia, where my company, Donald Lawrence Company (holding title to the property as Castlewood Partners Inc.), owns the residential development (River Run Ranch) immediately west of the existing power lines, north of Houston Avenue. This development currently consists of 225 completed homes, all of which have been sold, and an additional 72 acres of partially completed residential neighborhoods, which on completion and build-out will have approximately 300 homes. The City of Visalia has approved a master site plan and tentative subdivision maps for approximately 158 homes in the undeveloped area of River Run Ranch on the west side of the Edison right of way. There are 54 lots on 17 acres that are currently under development in this phase (see attached Exhibit A) pursuant to an approved subdivision map. We have submitted building plans to the City for these homes and construction will begin soon. All of the streets and roads in this portion of the River Run Ranch development have been completed and the main trunk lines for sewer, water, and storm-water have been installed. There are conceptual plans for the remaining 55 acres of the River Run Ranch development west of the Edison right of way, as shown on Exhibit A.

Our company also owns the land underlying the Edison power line easement and the 64 acres of vacant land east of the power lines, which has not yet been annexed to the City. This area, which has been pre-zoned for commercial land uses, low density multi-family, and single

family housing, will eventually comprise the eastern portion of our River Run Ranch development.

The attached map (Exhibit A) also shows the conceptual layout for a multi-use corridor that includes a possible alignment of the future Visalia Parkway and a pedestrian trail underlying the power lines.

The Edison company currently has a right of way for power lines that cross through the River Run Ranch property in a north-to-south direction for 2,300 feet. Edison's easement, which was established in the early 1900's, is 150 feet in width and allows use of the land by the underlying land owner, with height restrictions applicable to any improvements.

If any of the Alternate Routes, as identified in the Draft Environmental Impact Report for the subject project, are selected, it is my understanding that the existing power lines in the right of way that crosses the River Run Ranch would be changed. Specifically, the current twin sets of 63-foot lattice towers, carrying three lines each, would be replaced with new twin sets of mono-pole towers that will be anywhere from 120 feet tall to 160 feet tall, each pole carrying six lines for a total of twelve lines, as compared to the current total of six lines.

Question 3: How will the intensified use of the power line easement affect your planned development?

Answer: We specifically designed the River Run Ranch development with special features to offset the impact of the existing power lines. Specifically, we made provisions in the design that ensured that only seven of the planned 525 homes west of the Edison right of way are closer than 140 feet from the nearest power line. As is shown on the attached Exhibit A, we were careful to ensure that a great majority of the streets, public open space and other similar amenities were included in this 140 foot buffer. We designed the development to include this buffer because we were concerned about the desirability of homes situated any closer than 140 feet from the power lines. In particular, home buyers will be concerned about the possible electro-magnetic field effects of living close to the lines as well as having to listen to the constant buzzing noise that the lines emit and the crackling sound that comes off of the lines after it has rained.

1 If we had known that Edison was going to propose a transmission line project with pole
2 structures between 120 and 160 feet tall, we would have designed an even wider buffer area, in
3 the range of between 200 and 275 feet, instead of 140 feet.

4 If the height of the towers and the number of the lines on the towers are both doubled, it
5 is my opinion that the negative influence on potential buyers for homes in the immediate
6 vicinity is more than doubled.

7 **Question 4:** Doesn't raising the height of the pole structures actually provide a benefit
8 to your development?

9 **Answer:** As I understand it, even though the replacement poles will be taller under
10 the proposed project and the alternative routes, the lowest level of lines will still be
11 approximately 60 feet above ground level, about the same height as the current lines. Also, the
12 future lines will feature three vertical rows of lines, instead of just one. This means that there
13 will be an increased visual impact, with little or no offsetting benefit. Although I have heard
14 that the new pole set up will provide some level of improvement in electro-magnetic fields
15 exposure, in my experience, people do not bother to learn the latest science on electro-magnetic
16 field: if they can see the power lines, they will have a negative reaction, and there is no doubt
17 that more people will see the planned 160-foot towers than currently see the existing 60-foot
18 towers.

19 In my experience, any home that has an obvious view of major transmission lines is more
20 difficult to sell, and it will sell for approximately \$20,000 to \$30,000 less than other homes in
21 the same subdivision that do not have the same view of these lines. With the greater height, the
22 transmission lines will now be visible from further away; however, it is too late for us to
23 redesign our development to reduce the effect of the proposed project on the sales price of
24 homes in the development. It is my opinion that approximately 30 to 35 homes in our
25 subdivision will now experience a negative sales impact, with a corresponding total reduction in
26 value of approximately \$600,000 to \$1,000,000, as a result of raising the height of the pole
27 structures consistent with the project design. And that is only with regard to our currently
28

1 approved, but not yet built, subdivision. I have not attempted to calculate the negative impact to
2 the value of the land to the east of the power lines that we are holding for future development .

3 Even if we were able to redesign the development to provide a larger set back from the
4 transmission line right of way, that would translate into a much smaller return on our
5 investment because we purchased the land anticipating the current setback, not a larger set back.
6 If we had known of the proposed Edison project at the time we initially purchased the property,
7 we would have factored this lost land into the purchase price. As a ballpark estimate, the value
8 of the land that we will not be able to develop as a result of the project as currently proposed,
9 (approximately 8 acres, based on an additional 150 feet from west to east and 2,300 feet from
10 north to south) is approximately \$650,000 in current values (based on a conservative estimate of
11 \$80,000 per acre).

12 **Question 5:** Are there features that could be incorporated into the project that you
13 believe would offset the economic and social effects of the project on your development that
14 you have described and that would provide important community benefits?

15 **Answer:** We obviously have taken steps in terms of designing the development on
16 our own land, including providing a buffer area, to address the effects of the existing
17 transmission lines. Ideally, in addition there are public uses and amenities that could be added
18 in this area to address the additional effects of the proposed project that I have described above.
19 We have attempted to show one concept for such public uses in the potential trail alignment that
20 can be seen on the attached Exhibit A. Amenities within the trail corridor underlying the
21 transmission lines would include publicly supported landscaping, including trees to help offset
22 the vertical visual effect of the poles, and walking and biking trails or horse paths.

23 Attached as Exhibit B are a series of photos of the desired type of conjunctive use that
24 would provide concrete benefits to the community and would offset the significant economic
25 effect that the new transmission lines will have on the River Run Ranch development. These are
26 photos of a Pacific Gas and Electric utility alignment in San Jose, California showing the before
27 and after utility line corridor. These photos, obtained from the National Trails Training
28 Partnership website, are available on line at

1 <http://www.sjpark.org/Trails/SilverCrLower/SilverCrLowerPhotos.htm>. We have not been
 2 successful in getting such amenities established in our own buffer zones, primarily because we
 3 cannot get the necessary approval for these uses on the land under the lines. However, as the
 4 attached Planning West Magazine article from July-August 2008 - "Developing Near
 5 Transmission Lines" - shows, amenities such as landscaping provide one of the most effective
 6 methods to diffuse the effects of power lines and, as a result, contribute to an attractive
 7 community that serves to enhance neighborhood appeal and residential property values. (See
 8 Exhibit C attached hereto).

9 I also believe such a multi-use public open space area would help offset the impact of the
 10 project on the community at large, as well as to future planned development on the areas to the
 11 east of the City. Incorporating into the power line expansion project a conversion of the vacant
 12 land under the towers into a community amenity has the potential, in my opinion, to turn a
 13 negative influence on this neighborhood into a positive amenity that would be put to great use
 14 by a number of community groups and events.



**Extra Low Frequency
 Power Lines!**
 Property Devaluation Near Power Lines (Beuler)

[Back](#)

Posted:
 11 January 2000

----- Forwarded message -----
 Date: Mon, 10 Jan 2000 17:50:31 -0000
 From: John Bueler <buelnerds@earthlink.net>
 To: Roy Beavers <rbeavers@llion.org>
 Subject: Fw: houston appraiser and transmission lines

Mr. Beavers I found the article I was looking for. So many people quote this article but this is the first time I have actually read the article. Please make this available for all you readers if you think it will be of help to them. Thank you for your suggestions of how to find it....

The following article has been sent by a user at CALIFORNIA STATE UNIVERSITY via ProQuest, a Bell & Howell information service.

Power lines short-circuit sales, homeowners claim Wall Street Journal

From The *Wall Street Journal*
 Print Media Edition: Eastern edition
 New York
 Dec 8, 1993

Authors: Freedman, Alix M
 Pagination: PAGE B1
 ISSN: 00999660
 Subject Terms: Real estate
 Litigation
 Electromagnetism
 Electric power

Abstract:

After two decades of debate over the safety of the electromagnetic field, or EMFs, produced by electric power lines, courts in California, Florida and New York are now recognizing lawsuits against power companies that bypass medical issues and focus on the economic impact of home buyers' fears. Copyright Dow Jones & Company Inc Dec 8, 1993

Full Text:

The legal battles over the purported hazards of high-voltage power lines have shifted from health to real estate.

The new breed of plaintiffs are people like Jean and Martin Covalt, owners of a spacious villa in San Clemente, Calif., with avocado orchards, saunas -- and a power line running through their backyard.

Soon after the Covalts bought the house in 1989, San Diego Gas & Electric Co. workers added eight more wires to the line and cranked up the current. The fall-out: Near the family swimming pool, the electromagnetic fields, or EMFs, produced by that current rose to about 10 times the level that some people deem safe. The EMF readings were also extremely high in the bedroom of the Covalts' two infants.

Last year, after an epidemiologist dispatched by SDG&E failed to allay their fears, the frantic couple put their house up for sale. It didn't draw a single offer, even after its price was cut in half to \$750,000. Convinced the house is unsellable, the Covalts have stopped making their \$6,000-a-month mortgage payments and are wondering when their bank will foreclose.

Just before Thanksgiving, the Covalts delivered a jolt of their own: they joined with 22 neighbors in a class-action lawsuit against SDG&E. "We sank every dime into this house because we thought we would live here for 20 years," Ms. Covalt says. "The utility has basically ruined our lives and destroyed us."

Significantly, the lawsuit doesn't allege that anyone's health has been damaged by proximity to the power lines. Instead, these plaintiffs in tony San Clemente -- along with an increasing number of angry homeowners nationwide -- are saying that they should be compensated because the value of their property has fallen due to a perceived health risk.

Not surprisingly, SDG&E officials take a different view. "This is a group of well-to-do homeowners who purchased their home at the peak of the California real-estate market. . . and appear to be looking for a deep pocket to mitigate their loss in wealth," says Greg Barnes, an SDG&E lawyer.

For two decades, scientific debate has raged: How dangerous are the EMFs that emanate from every wire through which a current runs? Although the risks are believed to be low, some scientists have found an association between childhood cancer and power lines and similar risks among occupationally exposed workers.

A year ago, researchers from Sweden's prestigious Karolinska Institute reported finding up to a fourfold higher leukemia rate among Swedish children living near power lines. A companion study released at the same time by the National Institute of Occupational Health, also in Sweden, showed that male workers exposed to approximately the same levels of EMF had three times the rate of a certain kind of leukemia.

Still, certain other studies of workers have found no unusual cancer levels and health problems among exposed workers. And, no one has figured out how EMFs may cause cancer and how much exposure

might be perilous. The utility industry, which is now spending more than \$15 million a year to fund EMF studies, says the evidence is inconclusive.

Until now, plaintiffs charging that power lines caused their cancer have had scant success. But continuing scientific controversy and rising public awareness have produced plaintiffs like the Covalts. The biggest energizer: Courts in states including California, Florida and New York now allow lawsuits that bypass the medical issues to focus solely on the economic impact of home buyers' fears.

Last month, in a landmark case brought against the Power Authority of the State of New York, the state's Court of Appeals ruled that landowners whose property is seized by utilities for new construction can seek damages when "cancerphobia" lowers the value of the rest of their property. The judge said that property owners must present "credible, tangible evidence" of that fear. Plaintiffs' lawyers contend the ruling also applies to homeowners whose land hasn't actually been seized by a utility, but who live near new or existing lines.

Although their claims are largely untested, plaintiffs' new liberty to skip the science has utilities braced for more suits and more payouts. "Property devaluation cases are going to be a major source of litigation against utilities," says Michael Withey, a Seattle lawyer who is leading the nascent EMF bar's crusade. "They are cheaper to bring than personal-injury cases because you don't have to conduct mini-trials on the science."

Utility officials insist that EMFs pose no threat either to health or real estate values, but some are jittery about the sheer numbers of potential litigants. To date, transmission lines, which are highly visible and carry power cross-country at high voltage, have grabbed the headlines. Still the less imposing distribution lines that run through America's neighborhoods are far more ubiquitous and closer to homes. And these too can generate high levels of EMF.

"The potential impact of these suits may be greater because it's a lot easier to find someone who merely lives near a power line than someone with substantial EMF exposure who has died of cancer," says Mark Warnquist, a lawyer who represents the utility industry.

In Pleasantville, N.Y., Howard Reiss blames a Consolidated Edison Co. power line 75 feet from his house for driving him from his intended retirement home. Fearful for his health, he put his house up for sale in April and stopped counting after 89 prospective buyers trooped through his house (first priced at \$400,000 and now at \$275,000) without a single offer.

In Guilford, Conn., Kevin Brunelle accuses Connecticut Light & Power Co. of wreaking havoc on his marriage and his dream home, a two-family house located in the shadows of the utility's substation. In 1991, after his street gained media notoriety for what residents characterized as an unusually high incidence of EMF-related cancer, his tenants moved out. And when one of his sons developed a tumor in his leg, his wife and children decamped, too. Unable to handle his mounting debts, Mr. Brunelle put his house, appraised at \$140,000 in 1986, on the market for \$118,000. Eventually, his bank foreclosed; the house was sold last month after being listed at \$69,900.

Derek Benham, a new homeowner in Oakland, Calif., says when a realtor recently tried to show him a house a stone's throw away from a transmission line, he and his wife "just turned around and split." David Bolton, a Houston appraiser, did a study several months ago showing that 100 properties bordering a transmission line sold for 13% to 30% less than 100 comparable properties away from the line, but in the same neighborhood.

The utility industry tells a different story. Kansas City Power & Light Co. is just the latest to release a

Comment Letter O25
 study concluding that power lines have no impact on property prices. Utility officials argue that the economy, not fear of EMFs, is the prime culprit behind sluggish real-estate sales. And while many utilities are trying to reroute or reconfigure wiring on new lines to reduce EMF levels, they say the expense of rejiggering existing lines makes no sense since EMFs are an unproven hazard.

But some homeowners say such obduracy has made court their last resort.

At a town meeting with Con Edison Co. this past summer, Pleasantville residents entreated the utility to bury the line. But officials cited a \$10 million-per-mile figure, offering only to study the matter further. Now some irate residents have put out legal feelers. "They've pushed us to the point where we have no other alternatives," says Mr. Reiss. A Con Edison spokesman replies that the utility's concern is not the money but the absence of information about what levels of EMF may be unsafe.

Similarly, Dr. Mark McCartin, who brought the class action against SDG&E last November, says that he and his neighbors are fighting for the health of their kids and "would get out of their hair forever" if the utility would simply move its line to an unpopulated area.

But Mr. Barnes, SDG&E's lawyer, estimates that moving the three-mile line in question would cost a prohibitive \$1.8 million. The plaintiffs, he adds, turned down SDG&E's offer to reconfigure the line to cancel out some of the magnetic fields. That would have reduced EMF levels by up to 70% for a mere \$76,000.

It isn't clear if line-linked property claims will turn into the next asbestos litigation. Since EMFs are so omnipresent -- flowing from cellular phones, hairdryers and VDTs -- plaintiffs' lawyers suspect jurors will require land owners to offer powerful proof that EMFs truly were the cause of declining property values.

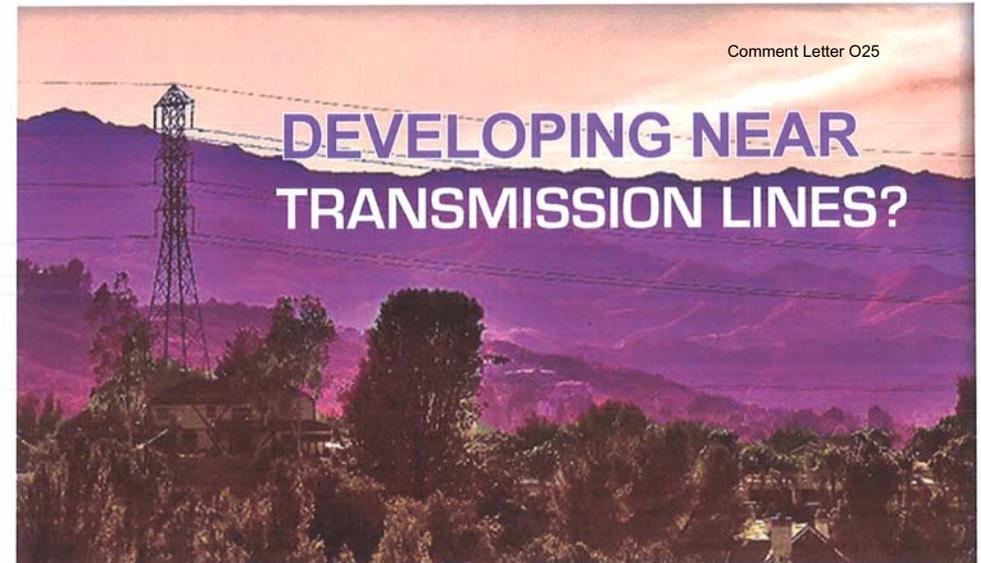
And things might prove tricky even for homeowners armed with reams of market data. Recently, for example, Dorothy English was forced to take a \$70,000 loss on her Feasterville, Pa., house, located just 100 feet from Philadelphia Electric Co.'s power line. Ms. English, who wants to sue the utility, claims the property registered dangerous levels of EMF. But Deborah Taylor, the new buyer, says the line never fazed her.

Why was the house such a bargain? "It didn't show very well because they had three dogs and 10 cats and the litter boxes on the wall-to-wall carpets could make you gag," Ms. Taylor says.

Credit: Staff Reporter of The Wall Street Journal

[Back to Top](#)

[Back](#)



Comment Letter O25

A little planning can go a long way in minimizing their impact.

BY GARY HOLISKO, MCIP

Lands under power lines and transmission towers, though primarily owned by private landowners, are subject to specific rights contained in the statutory right of way agreements referred to as rights of way. The agreements restrict owners' rights to activities that do not impact public safety, interfere with the operation of the lines, cause a hazard, or interfere with the rights granted. They also generally allow for the construction and maintenance of the existing facilities, including tree cutting and their replacement with future lines.

BC Transmission Corporation (BCTC) is a Canadian company established in 2003 as a provincial Crown corporation to focus on building and maintaining a safe, reliable and cost-effective power grid. BCTC recently published guidelines for development adjacent to its transmission corridors. The guidelines will assist landowners, designers, planners, developers and communities who are working within or beside power lines and transmission towers to minimize their impact and promote a quality environment.

BCTC was formerly the transmission group within BC Hydro, another provincial Crown corporation which continues to be responsible for generation and distribution services in much of BC. While BC Hydro retains ownership of the physical assets and the legal tenure for the rights of way, BCTC is responsible for operating, planning and maintaining the province's publicly owned high-voltage electric transmission grid. Transmission voltage power is delivered through

an interconnected system of more than 18,000 kilometers of transmission lines to substations which in turn step down the voltage for distribution. BCTC manages 20,500 steel towers, 75,000 wood poles, and 287 substations.

Designing Around Power Lines: Draft Guidelines

Landowners and developers often see proximity to power lines and rights of way as a factor that may affect property values. However, with effective planning and design, transmission corridors can provide benefits to landowners and create better, more aesthetically pleasing communities. A right of way on private property can create opportunities for individual property owners to enjoy larger lot sizes with the potential for large gardens and outdoor spaces, while the use of public right of way corridors for public amenities such as walking trails, playing fields and bicycle paths contributes to attractive communities which in turn serves to enhance neighborhood appeal and residential property values.

The Design Elements

It is important to create a harmony between density, alignment, orientation and landscaping, in order to create an aesthetically appealing community.

Topography

The location of towers can have an enormous impact on public perception. When towers are set in an elevated position and are viewed from lower ground, the scale and visual impact of the towers is emphasized. Conversely, where towers are viewed from an elevated position the visual impact is reduced. Towers set across the brow of a hill will be silhouetted against the sky and will appear more prominent than towers set in a similarly elevated position but with rising land or built development behind them.

Density

The density of property surrounding the tower can also affect its visual impact and perception in the community. By placing buildings with higher heights closest to the overhead power line, views of the line from public areas can be minimized. Higher densities close to power lines, particularly in residential areas with lower heights, can typically have a negative perception.

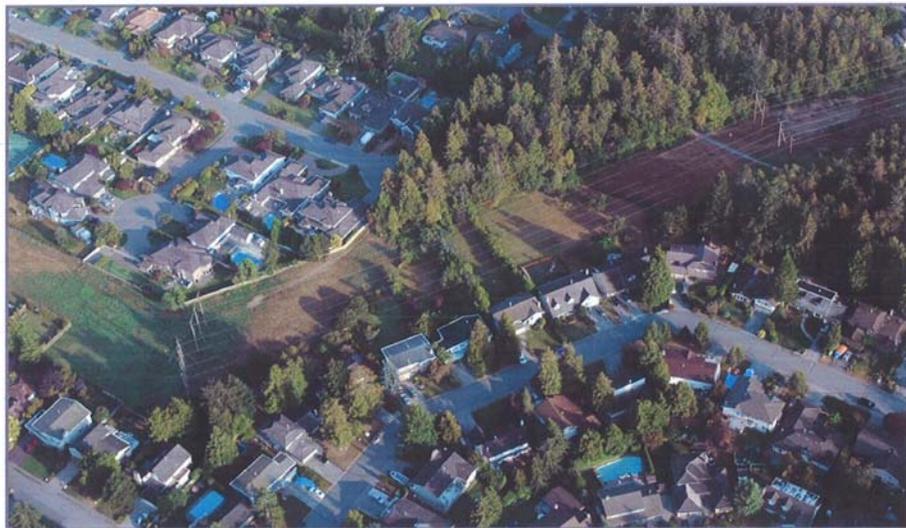
Alignment and Orientation

The alignment of streets and paths can reduce the number of direct views of towers, minimizing their impact and reducing the impression of a linear corridor.

Buildings should be oriented to minimize direct views of towers. Some developments may face towards the overhead power lines, rather than towers, as part of a variety of design responses to the transmission route. Development blocks adjacent to overhead power lines can also be left open ended, using the resultant space to create public gardens, squares or parking courts. The use of buildings oriented perpendicular to the lines, offers the opportunity to minimize direct views towards the route, significantly reducing the visual impact from streets, buildings and gardens. This orientation is best suited for high and medium density developments usually in the form of high rise condominiums, apartments and town homes.

The orientation of homes parallel to the right of way does little to minimize the visual impact of the lines from inside the homes. One solution is to locate cul-de-sacs on the edges of the right of way and between towers. Curving streets and paths, even by relatively small degrees, can significantly reduce the visual impact of towers. Views toward towers may occur at some distance from the tower, and can also be framed by new street scenes and public open spaces at some distance from the towers, particularly where there may be changes in topography.

The arrangement of buildings, boundaries, fences, paths and planting parallel to the transmission route over long distances will tend to highlight the presence of overhead power lines and the linear nature



Typical residential development backing onto two 230 kV H-frame lines in Delta, BC.

“Landscaping provides one of the most effective methods to diffuse the effects of power lines”

of the route and will make them more obtrusive. However, where one or more of these elements is varied (and not parallel), the linearity of the transmission route and its overall prominence can be diminished.

Distance

Varying the distance of development from transmission facilities is an important design tool. Buildings are not permitted within the right of way. Auxiliary buildings should be kept, as a minimum, at the edge of the right of way or set back to allow uses not otherwise permitted to take place within the right of way (e.g. in-ground swimming pools, greenhouses, garages, etc). In commercial and multi-residential settings, the area of the lot within the right of way can be used for parking and other amenities.

Landscaping and Screening

Landscaping provides one of the most effective methods to diffuse the effects of power lines and use the space within and adjacent to the right of way in a manner which is aesthetically pleasing and an amenity to homeowners. Screening can enhance the quality and intimacy of the immediate setting by creating the perception that towers have receded into the distance. The effectiveness of any screening depends on the distance of the viewer from the overhead power line and from the screening.

Within the right of way, trees and shrubs generally cannot exceed three meters in height at maturity. Appropriately low growing vegetation can be located within the right of way, while larger species can be planted near the edge, thereby reducing the visual impact of the lines and enhancing the overall environment.

Outside of the right of way, strategic screening can enhance the quality and intimacy of the area, giving the impression that towers and lines are further away. Mature trees planted along streets can effectively screen views and enhance the residential environment. Layers of planting create a series of silhouettes into the distance, creating a depth in the field of vision that helps to reduce the visual impact of overhead power lines. In this way, views of towers can be effectively screened without the need for continuous belts of planting. When branches of mature trees actually arch over the street, then views of towers can be obscured for much of the year. Consideration should be given to the use of screening in layers with varying heights to match site circumstances.

Community Amenities within the Right of Way

Most public amenity uses are on municipal lands. While use of the right of way has some restrictions, the presence of long corridors of clear, open, space provides the opportunity to develop significant private and community amenities. Consent of the owner and the local government as well as BCTC will be required for any public use of a right of way.

In order to best use this space, it is worth considering design ideas, such as:

- Breaking the transmission route into cells using roads, bridges, etc.
- Creating places with a variety of uses such as garden squares and parking lots
- Creating meandering paths and varied planting
- Providing a mix of activities beneath and adjacent to overhead power lines

Compatibility

The following are examples of compatible uses within the right of way, subject to maintaining safety clearances.

Public Open Space and Playing Fields - active recreational uses may take place close to overhead lines subject to the nature of the activity, layout of playing fields and the level of supervision. The location and type of lighting used for playing fields within rights of way need to be reviewed by BCTC where high voltage overhead lines are present.

Nature and Conservation - the retention or creation of nature conservation areas may be particularly suitable where public access to the area is restricted or prevented.

Circulation Paths - active recreation paths, roads, cycle paths and walkways can be successfully accommodated beneath high voltage overhead lines.

Allotments and Community Orchards - using rights of way for allotments and community orchards

Parking - accommodating ancillary parking beneath high voltage overhead lines.

Private Gardens - using rights of way for gardens and planting.

Power Line Safety and Maintenance

Contact, or near contact, with high voltage equipment is extremely dangerous and must be avoided. Objects that approach overhead electricity conductors too closely can cause fatal or severe shocks and burns. In order to prevent such incidents, minimum safety clearances for all overhead power lines are prescribed, which must be maintained between conductors and the ground, trees, buildings and any other structures, such as street lighting.

Care must be taken in unloading, stacking or moving material underneath conductors and in the construction of buildings or other structures in the vicinity of an overhead power line. Generally, buildings located outside of the right of way are safe from any of these concerns.

Emergency access to large buildings that are being constructed adjacent to transmission rights of way also must be considered. For example, the crew on a fire truck attempting to extinguish a fire in a multi-story development at the edge of a right of way must have adequate clearance from the transmission lines.

1. Induced Currents

Induction is the transfer of electric current or charge to an object that is not directly in contact with power lines. Induction can be an issue with buildings that are more than two stories, or long buildings that are parallel and located adjacent to high voltage (generally 230 kV and higher) lines and rights of way. As the height of a building increases, it comes into closer proximity to the high voltage wires with greater exposure to induced currents. While there is no direct public safety risk, it does significantly increase nuisance or micro-shocks. Developers should retain a professional consultant with expertise in calculating electric and magnetic fields, mitigation strategies and safety issues during construction and after occupancy if they plan to build in close proximity to high voltage transmission lines.



Playing fields and tennis courts underneath 230kV and 500 kV lines in Coquitlam, BC.



Townhouse development built on angle to 500 kV lines with trees screening right of way in Surrey, BC.

2. Electric and Magnetic Fields (EMF)

Power frequency (also referred to as extremely low frequency or ELF) electric and magnetic fields are present everywhere that electricity flows. All electric wires, and the lighting, appliances and other electrical devices they supply, are sources of electric and magnetic fields. Scientists have been researching EMF and possible health effects for more than 30 years, and this extensive research has yet to establish a link between health risks and EMF. Health Canada and the BC Centre for Disease Control state that there is no reason to be concerned about exposure levels in typical Canadian homes and workplaces, regardless of the proximity to power lines.

3. Changes to Ground Level

Changes to the ground level are not permitted without approval, as there must be a minimum distance between the lowest point of the transmission line and the ground. When ambient temperature is high and transmission lines are operating at maximum capacity, the lines will sag.

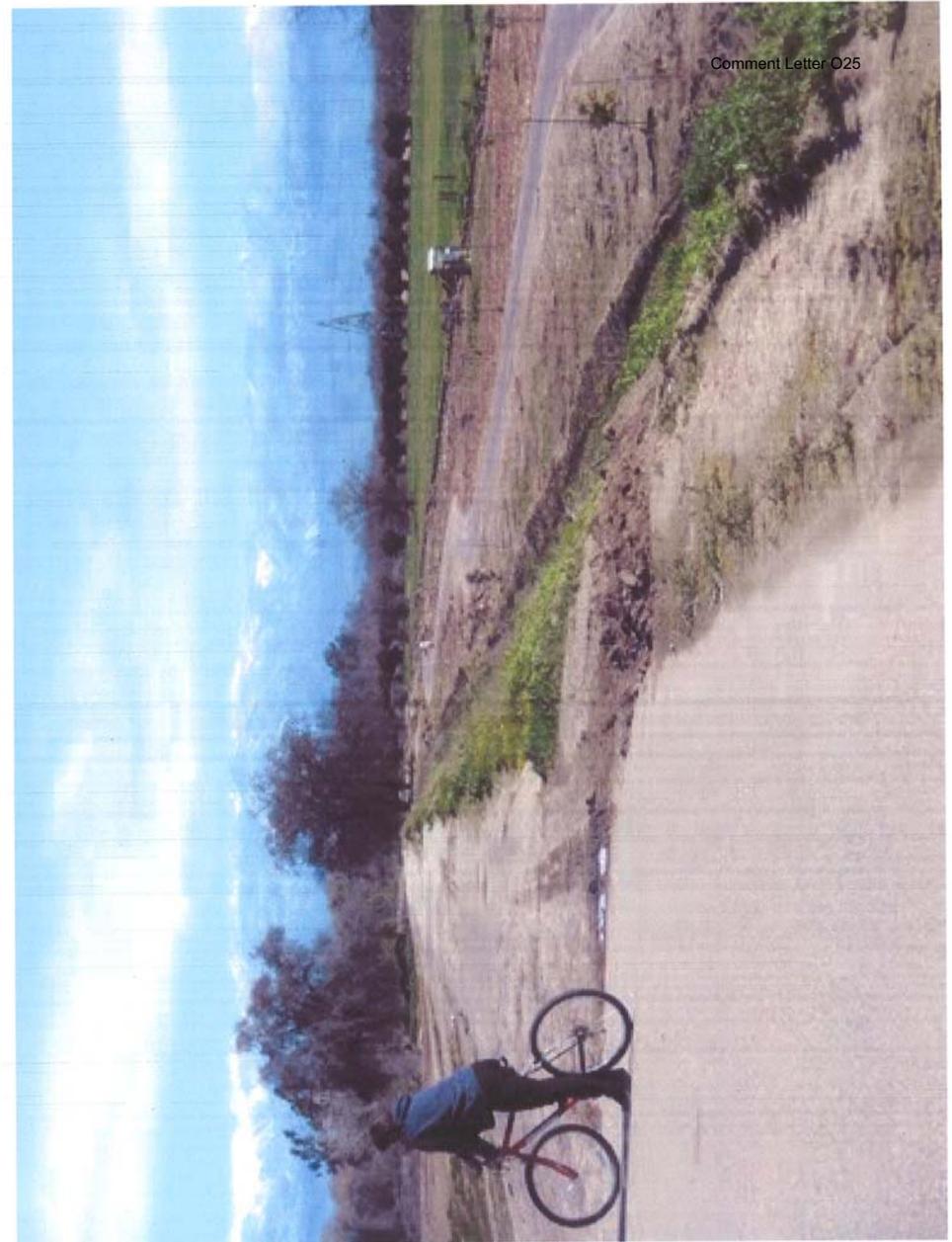
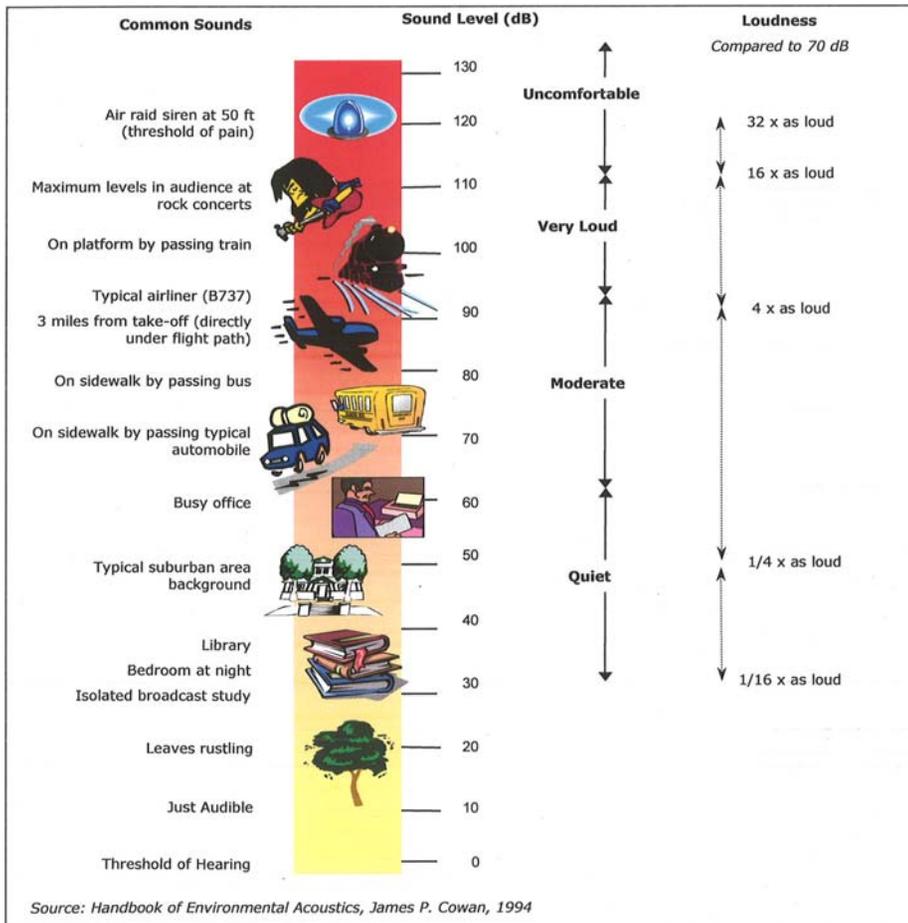
Conclusion

Transmission towers and lines are a necessary part of the infrastructure that enables us to provide electricity to our homes and businesses. Many transmission lines built in what were formerly rural areas are now being "encroached" upon by development. Hopefully this article, and the guide it is based upon, will provide some helpful guidelines on how to best consider transmission lines when developing lands within and nearby. By doing so, the owner, developer and community will all benefit. ♻️

These guidelines were approved and placed on the BCTC website in April of this year. Visit them at: www.bctc.com/the_transmission_system/rights_of_way_prop_rights/

This is an updated version of the article that was published in Planning West magazine, September 2007 edition. Reprinted with permission, Planning Institute of British Columbia and BC Society of Landscape Architects.

Typical Sound Levels







Comment Letter O26

07/31/2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

RE: San Joaquin Cross Valley Loop Transmission Project

Dear Mr. Uchida:

We learned about Southern California Edison's above referenced project through the California Public Utilities Commission's (CPUC) website and were able to attend the Draft Environmental Impact Report public comment meeting. One of the potential conditions of CEQA review may require the permit applicant to mitigate for any, wetland or wildlife habitat impacts. Wildlands, Inc. specializes in providing a cost effective and environmentally sound solution to meet your mitigation requirements.

Wildlands, Inc. operates both the Sand Creek Conservation Bank and the Great Valley Conservation Bank. These banks create a "win-win" situation for project developers and the environment. By purchasing mitigation credits you can quickly solve your mitigation requirements and contribute to the overall health of the environment within the vicinity of your project site. Credits for California tiger salamander, San Joaquin kit fox, vernal pool fairy shrimp and vernal pool tadpole shrimp are currently available for sale in Tulare County.

Please feel free to contact me at (916) 435-3555 to inquire about how Wildlands can help solve the San Joaquin Cross Valley Loop Transmission Project's wetland and habitat mitigation requirements.

Very truly yours,

Wildlands, Inc.

Brian Monaghan
Project Director/Corporate Sales
Wildlands Inc.
3855 Atherton Rd.
Rocklin, CA 95765

O26-1

DEPARTMENT OF TRANSPORTATION

DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066



*Flex your power!
Be energy efficient!*

August 3, 2009

2135-IGR/CEQA
6-TUL-GEN
DRAFT EIR
SOUTHERN CALIFORNIA EDISON
SAN JOAQUIN CROSS VALLEY
LOOP TRANSMISSION LINE
SCH #2008081090

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Dear Mr. Uchida:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the San Joaquin Cross Valley Loop Transmission Line Project and the 3 Alternative routes (Alt #2, #3 & #6) submitted by Southern California Edison (SCE). The project involves the replacement of two sets of single circuit 220 kV line with a double transmission line within existing SCE ROW and the construction of a double circuit line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation via one of 4 proposed transmission line routes. The proposed project route is located in Tulare County including portions of the City of Visalia, Farmersville, Woodlake and the unincorporated areas of Tulare County. Caltrans has the following comments:

Caltrans has no preference on which transmission route is ultimately chosen. The DEIR identifies Alternative #2 as the environmentally superior alternative preferred over the proposed project route. All proposed transmission routes transverse the State High System (State Route 198, 216, 245) at various locations.

Caltrans does agree with the mitigation measures identified in the DEIR for the proposed project route, which would also reduce impacts to less than significant for any of the proposed alternatives. However, it is recommended that mitigation measure 4.14-1b be amended to add the requirement that an encroachment permit be approved by Caltrans as part of the Traffic Management Plan prior to commencement of any construction activities that affect a state route.

As noted in our prior comments, an encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports

O27-1

"Caltrans improves mobility across California"

Mr. Jensen Uchida
August 3, 2009
Page 2

Comment Letter O27

Comment Letter O28



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

(documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations."

↑
O27-1
cont.
↓

Please send a response to our comments prior to staff's recommendations to the California Public Utilities Commission. If you have any other questions, please call me at (559) 488-7396.

Sincerely,

PAUL-ALBERT MARQUEZ
Central Planning Branch Chief

David Deel
Transportation Planner
District 6

c: Mr. Ted Smalley, Executive Director, Tulare County Association of Governments
SCH #2008081090

The following document is being introduced to The CPUC for information only. In reading the Draft EIR Report, it is not clear whether actual/true pump, electrical and irrigation infrastructure replacement costs were factored into the report or even considered. Since water, and the machinery and pipelines required to deliver the water, is an integral part of growing and maintaining crops, the costs to replace the infrastructure that is displaced or disrupted by Edison's Proposed Route 1 should be considered in the overall cost to Proposed Route 1.

↑
O28-1
↓

Respectively submitted,
Bill Gargan
Owner, Kaweah Pump Inc.



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

ESTIMATED COSTS TO REPLACE EXISTING WATER WELLS, PUMP ELECTRICAL SERVICE, DEEP WELL TURBINE PUMPS, IRRIGATION FILTER STATIONS, BOOSTER PUMPS AND PIPELINE INFRASTRUCTURE

Contractors State License No. #826935



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

WATER WELLS AND WELL DEVELOPMENT

There are many variables when discussing water wells, size, depth, location type of well etc.... No two wells are alike. Drilling a well is generally accomplished by using one of two methods. Driving casing into the ground until a suitable landing is found and continuing down with a drill bit or bailer until sufficient water bearing formations are exposed, is known as **Casing Driven** wells. A **Gravel Envelope** well is literally "drilled". The procedure involves drilling the appropriate size bore hole using water and drilling mud as support, sampling the formations to determine the final depth and water bearing potential, installing perforated casing at the appropriate water bearing locations and blank casing elsewhere, then pumping or placing an engineered gravel around the annulus between the casing and the exposed earth, swabbing the gravel into place and then circulating out the mud and water that had been used as support during the drilling process.

A well is not complete until it has been pump developed. This involves installing a turbine pump with an engine as the prime mover, into the new well. Pump developing accomplishes several things. It removes the sand that is generally in most casing driven wells, cleans the water bearing areas that become infused with drilling fluids in gravel packed wells, settles and packs the gravel annulus in gravel packed wells and in both casing driven and gravel packed wells, develops the water bearing strata. During development of the well, data is generated that allows the pump contractor to adequately design a pump that fits that specific wells yield.

Contractors State License No. #826935



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

Casing Driven Wells

6 7/8" Steel Cased Open Bottom Well @ 400 ft	\$11,000.00/\$14,000.00
10" Steel Cased Open Bottom Well @ 400 ft	\$18,000.00
12" Steel Cased Open Bottom Well @ 400 ft	\$21,000.00

Well Development

30 hrs Well Development; Pump Setting @ 200 ft	\$13,500.00
--	-------------

Estimated Cost for New 12" Steel Cased Open Bottom 400 ft Well, Completed and Developed

\$34,500.00

Direct/Reverse Rotary Gravel Envelope Well

10" 400 ft Gravel Packed Well Perforated To 200 ft	\$38,000.00
12" 400 ft Gravel Packed Well Perforated To 200 ft	\$40,000.00
16" 400 ft Gravel Packed Well Perforated To 200 ft	\$49,000.00

Well Development

30 hrs Well Development; Pump Setting @ 200 ft	\$13,500.00
--	-------------

Estimated Cost for New 12" Gravel Envelope 400 ft Well, Completed and Developed

\$53,500.00

Contractors State License No. #826935



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

PUMP ELECTRICAL SERVICE AND DEEP WELL TURBINE PUMPS

Every pump plant, unless it is an engine driven pump, requires an electrical service. This service generally includes a power pole, meter service, pump starting panel and wire from the electrical supplier to the meter and wire and conduit from the pump starter to the electric motor on the pump. Horsepower varies from very small, 5 hp or less, to very large, 200 hp or greater. All pump electrical service is built specifically for a particular pumping plant. At times, a pump service may involve the additional installation of underground conduit from the electrical supplier to a remote pump location.

Typical Turbine Pump Electrical Service Cost

Pump service consists of, 25 ft pole, meter-can, pump starter panel, wire and conduit

5hp/10hp	\$2,275.00
15hp/25hp	\$2,385.00
30hp	\$3,120.00
50hp/75hp	\$3,340.00
100hp	\$4,250.00

TURBINE PUMPS

The name "turbine pump" is a generic term. It actually is a centrifugal pump in a well that is driven by a shaft enclosed in a tube or pipe and driven by an engine or electric motor at the top and is generally referred to as a Vertical Deep Well Turbine. A "turbine pump" can also be a submersible centrifugal pump where the pump is driven by a motor connected directly to the pump and both are submerged under water in the well. This is generally referred to, simply, as a Submersible Pump. Both have pipe connected to them that conveys the water to the surface. Regardless of which type, Deep Well Turbine, or Submersible Pump, both are highly engineered pieces of machinery that have been designed specifically for a particular duty in a specific well.

Contractors State License No. #826935



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

Since both types of pumps are designed for a specific well under specific operating conditions and set at varying depths in the well, determining cost is, again, specific to that particular pump. Following are general costs for deep well pumps in our region.

10hp-20hp Vertical Pump	\$18,000.00/\$25,000.00+
25hp/30hp Vertical Pump	\$20,000.00/\$30,000.00+
50hp Vertical Pump	\$28,000.00/\$35,000.00+
75hp Vertical Pump	\$34,000.00/\$50,000.00+
5hp-71/2hp Submersible Pump	\$4,700.00/\$8,500.00+
10hp	\$4,700.00/\$9,000.00+
15hp	\$5,000.00/\$9,000.00+
20hp	\$7,500.00/\$12,000.00+
25hp	\$9,000.00/\$15,000.00+

Generally speaking, most pump applications requiring 30hp or more, a vertical turbine pump would be used.

Contractors State License No. #826935



General Engineering Contractor

15499 Avenue 280 • Visalia, California 93292 • Office 559 747-0755 • FAX 559 747-3881

Comment Letter O28

IRRIGATION FILTER STATIONS, BOOSTER PUMPS AND PIPELINE INFRASTRUCTURE

Citrus groves in our area, and most tree crops, are irrigated by highly sophisticated irrigation systems. These systems are designed for a particular crop on a particular field utilizing a set flow from a well water source and/or irrigation district. The primary focus of these systems is irrigation; most have a secondary function as frost protection. The most common type of irrigation system in our trade area is micro-irrigation. Micro-irrigation is a term given to highly engineered irrigation systems that utilize water conserving emitters and spray jets. These systems are made up of the same components regardless of size or shape of the field. The components include a pump, filter station, underground pipe lines, irrigation tubing down the tree rows and low-flow emitters or jets attached to the tubing. These systems are considered permanent!

The variables to these systems are that they are all unique. For example, one system may have a Self Cleaning gravity Screen Filter, 10gph micro-sprinklers and 3/4" tubing, and a 30 hp booster pump connected to a deep well pump. Another may have a 4 barrel Sand Media Filter, 15gph micro-sprinklers, dual tubing, and a 50 hp booster pump connected to the irrigation district. Or other systems could contain screen filters, sand separators, fertigation and chemigation capabilities, auto timers, dual pumps, self flushing, auto flushing etc, etc.... The point being, not one system is identical to any other system.

System costs are as variable as the systems themselves. Most are approximately \$2,100.00 to \$4,500.00 per acre for a complete system. So a 20 acre orange grove could have a \$90,000.00 irrigation system. Filter costs, for replacement, vary in price from \$12,000.00 to \$60,000.00 installed. Pipeline infrastructure costs vary from \$3.00/ft to \$12.00/ft installed. Every system has a booster pump. What size? That depends on the system. Some have 5hp and 7 1/2hp pumps, others have 30hp up to 150hp.

If an irrigation system were to be cut in half, so to speak, the old system would have to be abandoned and new systems, for "both" halves, would have to be engineered and reinstalled. In a sense, the cost to design and install irrigation systems for both halves of what once was a single grove will be approximately twice the cost of the original irrigation system.

Contractors State License No. #826935



COUNTY OF TULARE
BOARD OF SUPERVISORS

ALLEN R. ISHIDA
Supervisor - District One

July 28, 2009

Application No.: A.08-05-039

Exhibit No.: _____

Witness: Allen Ishida

Testimony of

Allen Ishida, District One Supervisor

Tulare County Board of Supervisors

Allen Ishida
District One
Tulare County Board of Supervisors
2800 W. Burrel Ave.
Visalia, CA 93291
Phone: (559) 636-5000
Fax: (559) 733-6898
Email: aishida@co.tulare.ca.us

July 28, 2009

Dear Commissioners:

I am a third generation citrus farmer, who spent over twenty five years in the commercial real estate business selling farm land in California. I have a sound professional opinion of what is prime and unique farm land. The definition of prime farm land is based not only on soil ratings and climate, but also the quality and quantity of water available. Route 1 traverses some of the finest soils and underground water supplies in the state.

I have read the Environmental Impact Report on the Cross Valley Loop Project and would appreciate adding the following comments. The land adjacent to the foothills has a climate which is conducive to the production of citrus because it is less susceptible to freezing temperatures which damages citrus fruit. For this reason the California Citrus Industry is located along this thermal belt where water is available. Route 1 is located in a micro-climate within this thermal belt and in the winter is one of the warmest areas in the citrus belt.

Route 1 disrupts one of the few areas in the citrus belt that has sufficient ground water to irrigate its crops. Most of the citrus belt is reliant on surface water from the San Joaquin River which is delivered by the Kern-Friant Canal. Beginning this year Friant Water Users will be giving up ten percent of their surface water for the restoration of a salmon run in the San Joaquin River. This ten percent loss is just the beginning. Farmers dependent on this surface water could end up like the Westlands Water District and receive a zero allocation for surface water. Producers including myself, who are totally dependent on surface water, will be out of business. The loss of Friant Water could result in the California Citrus Industry losing sixty percent of its production. The citrus industry in Tulare County is the second largest income producing crop in Tulare County. We need to protect every acre of citrus that has the soils, water, and micro-climate that is represented by the area traversed by Route 1.

It takes approximately 48 acres of rangeland to mitigate the income loss of one acre planted to a trees crop. This is another reason that I believe Route 3 is the right choice for the Loop Project.

Thank you,

Allen Ishida, District One
Tulare County Board of Supervisors

O29-1

LEMON COVE DITCH COMPANY

PO BOX 44259 LEMON COVE CA 93244-0259
PHONE 559-597-2409

July 24, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Re: San Joaquin Cross Valley Loop Transmission Project, Draft EIR

The purpose of this letter is to provide comments on the Draft Environmental Impact Report (DEIR) for the San Joaquin Cross Valley Loop Transmission Project on behalf of Lemon Cove Ditch Company.

Lemon Cove Ditch Company owns water delivery pipe that runs underneath Structure # 95 and continues to run in the right of way. It is our understanding that the restrictions of uses within the Proposed Project right of way, as per Section 2.8 of the DEIR, Underground facilities, such as utility services and irrigation systems¹ will cause our facilities to be considered non-compliant and cause our facilities to be relocated, should the Proposed Project be selected as the final project.

DEIR Impact 4.2-5 states: "The Proposed Project could impact existing irrigation and other ancillary systems required for farming productivity, resulting in the conversion of Farmland to non-agricultural use." The DEIR classifies the impact as "Class II." The Lemon Cove Ditch Company Board of Directors would like this impact to be changed from "CLASS II" to "CLASS I" due to the fact that even more Farmland will be taken for new easements needed for replacing the water distribution system owned by Lemon Cove Ditch Company and the numerous other water distribution systems that will be impacted throughout the Proposed Project area.

The DEIR does not identify or quantify the order of magnitude of this impact. The issue of impacts to water availability and distribution is minimized throughout the document. Mitigation Measure 4.2-5 defers the issue of replacement of water systems to the project construction period, and the DEIR fails to evaluate the feasibility of accomplishing mitigation of this potentially very serious impact. There is no documentation in the DEIR that demonstrates that water systems

¹ DEIR page 2-40

can be replaced to provide water quality and quantity to existing levels and the DEIR should be amended to provide support the feasibility of the Mitigation Measure, if it is still intended to offset or mitigate the impacts.

Deferring the issue of replacement of water systems to the construction stage of the project, also defers the identification of impacts associated with the project, which is contrary to the intent of CEQA. What if during the construction period it is determined that not all water systems can be replaced? In the words of the DEIR, "Removing farmers' ability to irrigate crops and orchards could effectively render formerly productive Farmland unusable, resulting in the conversion of additional Farmland to non-agricultural use."² Such a conversion is considered elsewhere in the DEIR as a "Class I" impact.³ There is no supportive documentation in the DEIR to support the statement that "Implementation of Mitigation Measure 4.2-5 would ensure that no additional Farmland is indirectly converted to non-agricultural use because of the impacts to existing irrigation and other ancillary systems required for farming productivity."⁴

In summary, the DEIR does not adequately analyze the impacts of the Proposed Project to water availability and water distribution to Farmland throughout the Proposed Project area. The DEIR should be amended to fully identify the impacts and if Mitigation Measures are offered to offset the impacts, documentation should be provided to support the feasibility of implementing the mitigation measure.

Respectfully Submitted,



David Cairns, Secretary/Manager
Lemon Cove Ditch Company

Contact Information:

David Cairns, Secretary/Manager
Lemon Cove Ditch Company
PO BOX 44259
Lemon Cove, CA 93244
Telephone: 559-597-2409
Email: Kaweahl@aol.com

² DEIR page 4.2-16

³ Example found on DEIR page 4.2-15

⁴ DEIR page 4.2-16

O30-1
cont.

O30-1



DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE: 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

FACSIMILE COVER SHEET

DATE: September 14, 2009

TO: Mr. Jenson Ochida

FAX (415) 896-0332

FROM: Jacquelyn Ramsey

Phone (916) 324-0850

(916) 323-2379

Fax: (916) 327-3430

Website: www.conservation.ca.gov

NAJ

Number of Pages (including cover): 5

MESSAGE: On Friday, September 10, 2009 I faxed the accompanying document to you in error. Pages 2-4 of that document had erroneous headings, please replace the prior faxed letter regarding the San Joaquin Valley Loop Transmission project with today's faxed document. A hard copy will follow via U.S. Mail. I sincerely apologize for the inconvenience. Please feel free to contact me at the number indicated above with any questions or concerns. Thank you.

The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable and efficient use of California's energy, land, and mineral resources.



DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE: 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

September 10, 2009

VIA FACSIMILE (415) 896-0332

Mr. Jenson Ochida, Environmental Project Manager
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Subject: Notice of Availability of a Draft Environmental Impact Report (DEIR) – Southern California Edison's San Joaquin Cross Valley Loop Transmission Application Project (A.08-05-039) SCH # 2008081090 Tulare County

Dear Mr. Ochida:

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the DEIR for the referenced project for Southern California Edison (SCE), which is acting on behalf of the California Public Utilities Commission. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. We offer the following comments with respect to the project's potential impacts on agricultural land and resources.

Project Description

The project as proposed identifies SCE's objective to build an electrical facility to provide electric service to its customers, located in the southeastern portion of the San Joaquin Valley. The project is located in Tulare County, including portions of Visalia and Farmersville, the community of Lemon Cove, and unincorporated areas of the County. The application proposed by SCE is to replace approximately 1.1 miles of two sets of single circuit 220 kV transmission line with a single double circuit transmission line to be constructed on the western side of SCE's existing right-of-way (ROW) immediately north of the Rector substation. In addition, the applicant also proposes to construct an approximately 18.5 mile-long, double circuit transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission into the Rector Substation. The project would involve the acquisition of land restricted by Land Conservation (Williamson) Act contracts for the installation of electrical equipment and substation supporting structures from the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at the Rector Substation to accommodate the transmission lines, and remove wave traps and line tuners and installation of additional protective relays at the Rector, Springville, Vestal and Big Creek 3 Substations.

The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable and efficient use of California's energy, land, and mineral resources.

Mr. Jensen Uchida
September 10, 2009
Page 2 of 4

Mitigation Measure:

Based on the information provided in the EIR document, it appears that the project may have a significant impact on agricultural resources in the area. The EIR should provide an evaluation of all of the potentially significant agricultural impacts of the project and a description of feasible mitigation measures capable of reducing or avoiding those impacts. The project as proposed will impact permanent row and orchard crops, some of which are located on land restricted by Williamson Act contracts, and will negatively impact agriculture, along the proposed route.

O31-1

Under California Code of Regulations §15064.7, impacts on agricultural resources may be quantified by use of established thresholds of significance. As such, the Division has developed a California version of the USDA Land Evaluation and Site Assessment (LESA) Model. The California LESA Model is a semi-quantitative rating system for establishing the environmental significance of project-specific impacts on farmland. The model may also be used to rate the relative value of alternative project sites. The LESA Model is available on the Division's website at:

http://www.consrv.ca.gov/DLRP/gh_les.html

O31-2

As a mitigation measure the Department suggests that the local jurisdiction consider mitigating significant impacts due to the conversion of prime agricultural land and the cumulative loss of farmland. Where applicable, prior to the issuance of grading or building permits, applicants should be required to complete one or more of the following measures at a ratio of 1:1 for prime farmland or farmland of statewide importance, as defined by the Department:

- 1) funding and purchase of agricultural conservation easements;
- 2) purchase of credits from an established farmland mitigation bank;
- 3) contribution of land or funding to an organization that provides for the preservation of farmland in California;
- 4) completion of new Williamson Act or Farmland Security Zone contracts;
- 5) participation in any agricultural land mitigation program adopted by a local jurisdiction that provides equal or more effective mitigation than those listed above. Qualifying land can be within the local jurisdiction or outside the local jurisdiction for the same or equivalent crops.

O31-3

The Department encourages the use of permanent agricultural conservation easements as mitigation for agricultural land conservation. We recommend that the quality of mitigation farmland be equivalent to the type of contracted land being converted (e.g., prime for prime).

The Department also has available a listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. This compilation report may be requested from the Division at (916) 324-0850, or by writing to the Division of Land Resource Protection at the address indicated below. General information about agricultural conservation easements, the Williamson Act, and provisions noted above is available on the Department's website, or by contracting the Division. The Division's website address is:

<http://www.conservation.ca.gov/dlrp/index.htm>

Mr. Jensen Uchida
September 10, 2009
Page 3 of 4

California Land Conservation (Williamson) Act Lands

The project as proposed would permanently disturb 23 acres of land currently under Williamson Act contracts (affecting approximately 66 parcels under contract), and temporarily disturb 36 contracted acres. The DEIR provided several alternatives to the project as proposed and determined that alternatives 2, 3 and 6 are the most viable. Alternative 2 would permanently disturb 35 acres of Williamson Act contracted land (affecting 58 parcels under contract), and temporarily disturb 77 acres. Alternative 3 would permanently disturb 59 acres of Williamson Act contracted land (affecting approximately 53 parcels under contract), and temporarily disturb 103 acres. Alternative 6 would permanently disturb approximately 30 acres of Williamson Act contracted land (affecting approximately 74 parcels under contract), and temporarily disturb approximately 51 acres.

O31-4

Lands under Williamson Act contract are located in and around the project area, therefore, the Department recommends that the EIR address the potential impacts of the project on these contracted parcels.

The project as proposed will use existing ROW, and will also require the acquisition of additional right-of-way— some of which will involve properties restricted by Williamson Act contracts. When lands covered by a Williamson Act contract are acquired for a public improvement, the contract must be terminated in accordance with the procedures prescribed by the Act.

Acquisition via Eminent Domain or in lieu of Eminent Domain

Public agencies or individuals acting on behalf of public agencies are required to provide notice of the intention to acquire property located in agricultural preserves on which to locate a public improvement (Government Code §51290 (b)).

There are some limited exceptions to the requirement for a public agency to provide notice of its intentions to acquire property located in an agricultural preserve. One of the limited exceptions to the required notification provisions of the Williamson Act is for the construction, erection and alteration of an electrical facility (Government Code §51291.5). The project identified in the DEIR appears to meet the criteria for not providing notice to the Department. However, the Act does not exempt anyone from complying with the restrictions in a Williamson Act contract or the balance of the Williamson Act.

O31-5

A Williamson Act contract is an enforceable restriction pursuant to Article XIII, §8 of the California Constitution. If a public agency intends to acquire land under Williamson Act contract for a public improvement, the acquisition must meet the requirements of acquisition by eminent domain or in lieu of eminent domain (e.g., Code of Civil Procedure 1230.010 et seq. and Government Code §7260 et seq.) in order to void the contract pursuant to Government Code §51295. The Department does not provide counsel regarding eminent domain law but encourages entities to obtain legal counsel for this purpose.

Mr. Jensen Uchida
September 10, 2009
Page 4 of 4

Thank you for providing information about the preparation of the DEIR for the above-referenced project. Please feel free to contact the Department with any additional questions or concerns related to this matter at (916) 324-0850.

Sincerely,



Dan Otis
Williamson Act Program Manager

cc: Tulare County
Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277

3.2 Letters from Individuals

Comment Letter 11

Dr. and Mrs. David Bockman
15870 Avenue 309
Visalia, Ca 93292
e-mail: carnut123@yahoo.com
559-732-8242

June 9, 2009

Mr. Jensen Uchida
CPUC Project Manager
505 Van Ness Avenue
Energy Division, Room 4A
San Francisco, CA 94102

RE: Docket No. A.08-05-039 – San Joaquin Cross Valley Loop

Dear Mr. Uchida:

We would like to register very strong opposition to both routes 5 and 6 as proposed for Southern California Edison's San Joaquin Valley Loop project. Our objections are based in our concerns for both the agricultural and environmental effects of these two routes as well as the effect on the communities through which the lines and towers will pass.

For example:

The agricultural community in Tulare County is suffering from the depressed national economy and routes 5 and 6 would pass through acre upon acre of permanently planted orchards and groves. Eliminating the trees that would be within the required right of way as well as those under the lines and towers would cause further loss of agriculture related jobs. Important agricultural infrastructure such as wells, drive rows, barns, and out buildings would have to be eliminated as well.

We would like to ask the CPUC to direct Southern California Edison to construct the power lines along Route #3 which would create less impact to permanent orchards and groves, thereby, protecting the agriculturally related jobs that exist here. This route would have less impact agriculturally, environmentally, and would lessen the impact on communities and private homes.

We would like to ask the CPUC to direct Southern California Edison to use the existing right-of-way on the Rector line rather than taking new property.

Please add our names to the list to receive any further information about the projects/meetings/hearings of the status of the project.

Thank you for your serious consideration of our concerns.

Sincerely,


Dr. and Mrs. David Bockman

Comment Letter 12

From: kanez@pacificcrestequine.com
Sent: Wednesday, July 08, 2009 11:40 AM
To: San Joaquin Cross Valley Loop Project
Subject: cross valley loop transmission

Mr. Uchida-

I would like to comment on the Cross Valley Loop Transmission Project. My husband and I have great concern over the Route that would put the lines in proximity to Sequoia Union Elementary School. Our children attend this school, and from the Executive Summary Report, the lines/towers would be visible from the school. With other, more reasonable choices for the Route (including Route 3, our preferred route) why would the Utilities Commission even consider putting something like this in such proximity to an elementary school.

Thank you

Kelly Anez, DVM
Pacific Crest Equine
Exeter, CA 93221
kanez@pacificcrestequine.com
(559) 592-4753

11-1

12-1

From: jenna mattison [mailto:jennamattison@yahoo.com]
Sent: Wed 7/15/2009 4:13 PM
To: Yacknin, Hallie
Subject: filmmaker re:Edison San Joaquin Valley Cross Loop

Hello,

I'm a Los Angeles writer and film maker who recently purchased a ranch in Elderwood, Ca. I have read about the proposed lines and I wanted to make sure you were aware that the environmental impact study left out the fact that there are vernal pools and Indian Burial grounds on the proposed Route #2 & #6. Infact these areas are so rich in history and producing crops that I can't imagine this route would be an option. I understand that you must have a very daunting task of presiding over issues such as these but I truly believe that this issue is really going to come down to Edison's money. Sure route #3 may cost a bit more now but in 100 years when these historical sites are still preserved no one will be arguing over how much it cost to save them. And as for the vernal pools in the proposed route#3 they already have the existing lines over them so they are not viable or preservable. Thank you for your consideration.

Respectfully,

Jenna Mattison

13-1

13-2

7-16-09

Re: Cross Valley Loop Transmission Line Project

Dear Mr. Uchida,

I am writing on behalf of some very good friends of mine, Bob & Linda Hengst. Evidently, the Route being considered for the new Transmission Line Project would run right through several blocks of their family-owned land. Besides rendering some of their land useless and hampering the use of other land, they could lose the use of one of their best water wells.

This is a well-established, economically productive, community-minded family who have been a vibrant part of our valley life for generations.

Please do what you can to encourage the use of Route 3, instead. As I understand it, this route would incur the most limited impact on agriculture, property values, and Native American/Historical sites. Also, this route also has an existing line in place which could be utilized.

Personally, I work for a number of people in the Elderwood area, and am concerned that my employment opportunities could be hampered.

Thank You for Your Consideration.

Sincerely,
Larry Ronk
Fauyhoral

Larry Ronk
110N. Camelia
Farmersville, CA 93223

14-1

From: Bob McKellar [bob@mckellarfarms.com]
Sent: Saturday, July 18, 2009 2:31 PM
To: San Joaquin Cross Valley Loop Project
Cc: joshkirk@lightspeed.net
Subject: Edison's San Joaquin Cross Valley Loop
Dear Mr. Uchida

We favor Route 3 for all the same reasons, I'm sure have been enumerated by others. However, I would like to share with you a concern of mine over and above the more direct objections.

It is disheartening and disappointing to have Edison, a near governmental organization, attempt to force your wishes on the group of farmers here in our central valley. You have spent way too much money in an attempt to have your way in the face of public opinion which was against you from day one. You have wasted your money and ours. You have wasted your time and ours. Common sense tells you that if you have to build it, Route 3 is the best alternative. I respectfully suggest you will do us all, you included, a favor by just biting the bullet, cancel further expensive activities and tell the PUC you want Route 3 just as the public wants Route 3.

15-1

Thank you for your consideration. Bob McKellar

Robert H. (Bob) McKellar
McKellar Farms, Inc., Family Farm Fresh
Historic Seven Sycamores Ranch
McKellar Ranch Co. Inc.
P.O. Box 189 - 32988 Rd. 164
Ivanhoe, CA 93235 - 0189
(559) 798-0557 ext 103
Fax (559) 798-2615
Cell (559) 740-8444
bob@mckellarfarms.com
www.FamilyFarmFresh.com
www.sevensycamores.com

Robert A. and Mary L. Edmiston
36699 Millwood Drive
Woodlake CA 93286

July 20, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco CA 94104 CA 94104-4207

Dear Mr. Uchida:

As a resident and citrus grower in the Elderwood District near Edison's Alternate Route #2 and alternate Route #6, we state the following objections to the plan.

Water in the Elderwood District is a vital and very scarce commodity. As members and a Director on the Board of the Sentinel Butte Mutual Water Co., our ability and that of many others to farm is solely dependent on the availability of a dependable source of water. The proposed Routes #2 and #6 place our water supply in great jeopardy. Route #2 removes one well vital to the district water supply and two private wells supplying water to a large acreage of citrus farmland.

Although Edison is supposed to replace these wells, there is absolutely no assurance that due to the capricious nature of water strata in the area that a well of equal volume and quality could be found.

The tubular tower foundations are placed up to sixty (60) feet deep, this could adversely effect the water table.

In this area, as the underground water strata tends to flow in narrow channels and in spotty locations, any interference with the fragile water supply would cause severe loss of productivity and livelihood to many.

The total amount of productive Citrus Land that would be removed from production for right of away is considerable and a large economic loss.

16-1

16-2

July 20, 2009
Page 2

The Elderwood Valley is a prime location blessed with natural beauty. The Route of Alternate #2 crosses the valley for approximately one and one-half (1 1/2) miles during which five (5) different changes in direction occur. It is at these points that a change to the lattice towers is required. The amount of lattice towers placed in the middle of this beautiful valley would constitute an appalling eyesore. The amount of productive Citrus Land to be destroyed at each direction shift is considerable. This problem is not been addressed in the EIR.

16-3

The planned route through Antelope Valley poses two problems:

1. A section of the line passes directly through known vernal pools.
2. The Antelope Valley is known to the Yokut Indians as their Sacred Creation Site. It is here that they believe they arose from the earth. Their very vocal and obstructive actions must be taken into consideration.

16-4

16-5

16-6

The objections to Alternate Route #3 because of the Vernal Pools has been shown to be invalid as a by-pass was not investigated thoroughly enough in the EIR.

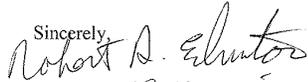
16-7

Unfortunately, the EIR does not address any of the critical issues in any way.

Because of these critical circumstances it cannot be stated strong enough that the Northern Route Alternate #3 with modifications be selected as the preferred route.

16-8

Thank you for your consideration.

Sincerely,


 Robert and Mary Edmiston

From: LaVerne Hodel [handf@att.net]
Sent: Monday, July 20, 2009 4:51 PM
To: San Joaquin Cross Valley Loop Project
Subject: Edison San Joaquin Cross Valley Loop
 Dear Sirs:

I am concerned about incomplete studies for the Edison's San Joaquin Cross Valley Loop transmission line.

Route 3 has not been thoroughly explored and assessed for feasibility. There is significant evidence that a "workaround" for the Stone Corral ecological reserve is possible and feasible.

Route 3 (as stated on 3-15 of the EIR) meets both basic project objectives, and meets all legal, regulatory, and technical feasibility criteria.

Route 3 would result in the permanent removal of fewer acres of farmland than the Proposed Project (route 1), and impacts would be generally similar on Cultural Resources as to the Proposed Route (Route 1).

17-1

Thank you for your consideration.
Evelyn Hodel

38131 Millwood Dr., Elderwood, CA. 93286
handf@att.net

From: LaVerne Hodel [handf@att.net]
Sent: Monday, July 20, 2009 4:52 PM
To: San Joaquin Cross Valley Loop Project
Subject: Edison San Joaquin Cross Valley Loop
Dear Sirs:

The EIR does not adequately identify, address or define mitigation measures to offset impact to farmland. The agricultural mitigation measures referenced throughout the EIR are deficient and incomplete regarding the proposed Routes for the Edison's San Joaquin Cross Valley Loop transmission line.

Route 3 has not been thoroughly explored and assessed for feasibility. There is significant evidence being introduced by PACE (at the July 23 hearing) that a "workaround" the ecological reserve is possible and feasible. The existing Rector Line currently cuts right through the Stone Corral Ecological Reserve, but it will need to be upgraded, so it would be practical to adopt Route 3 with the "workaround".

Route 3 meets both basic project objectives, and meets all legal, regulatory, and technical feasibility criteria. Route 3 would result in the permanent removal of fewer acres from farmland than the Proposed Project (Route 1).

If a different group making an EIR report would use these suggestions, they would come up with a different report.

Thank you for your consideration.

LaVerne Hodel
38131 Millwood Dr., Elderwood, CA. 93286
handf@att.net

18-1

37149 Road 192
Woodlake, CA 93286
559-564-2581
July 20, 2007

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
Yo Environmental Science Associates
225 Bush St., Suite 1700
San Francisco, CA 94104 4207

Dear Mr. Uchida,
The July 23 public comment meeting will be well attended both by my neighbors, friends and myself.
all of us have wells and agriculture (trees of all kinds) which would be directly affected by power lines on route 2.

Speaking for my husband and myself, our well might be affected which produces water both for our house and citrus. He purchased these 20 acres in 1967 because it had an existing well. A lot of the acreage around us was watered by a water company bringing in water from other locations. Our

19-1

well has been sufficient for these past
22 years. By now we are semi-
retired and living on a much smaller
income. It would be difficult
for us to have to drill a new
well and perhaps we would
not even find water.

Comment Letter 19

19-1
cont.

Route 3 remains the best alternative
because of less damage to intensive
agriculture and fewer trees re-
moved which combat the CO₂
which is increasing in our area.

Route 3 is a primary negative,
The Stone Corral Ecological Preserve
can easily be circumvented by
moving the line just a little.

19-2

There would be less damage to
all the ranchers' and home owners'
wells and trees by using Route 3.

Very truly yours,
Barbara Van Dellen

James Hitchcock
1811 E. Seeger Ct.
Visalia, CA 93292

Phone: 559 300-6819
Email: jamic2tammi@sbcglobal.net

July 21, 2009

Public Advisor's Office
CPUC Public Advisor
505 Van Ness Avenue, Room 2103,
San Francisco, CA 94102

Docket # A08-05-039 ~ San Joaquin Cross Valley Loop Transmission Project

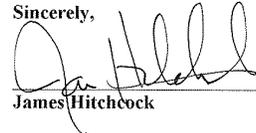
Dear Public Advisor:

I am writing to ask for you to support alternate Route 3 for the new proposed San Joaquin cross valley loop. This alternate route would be less invasive causing less farmland to be disrupted. There is a big worry about the water table. The drilling for the anchors to the support towers would cause the water table to drop. Farmer's are already scrambling for what water they have. This would surely be detrimental to anyone with any farmland along this corridor. I ask that you give Route 3 more consideration.

110-1

Thank you for your time and consideration of Route 3.

Sincerely,


James Hitchcock

William L. Maurer
325 E. Marinette Ave.
Exeter, CA 93221-9782
(559) 592-5595

21 July 2009

Dear Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

The following are my concerns and comments about the **Southern California Edison's San Joaquin Cross Valley Loop 220 KV Transmission Line Project Draft Environmental Impact Report (EIR)**, CPUC A.08-05-039/SCH #: 2008081090.

Page 2-1, Para 2.2
The Project runs through the northern portion of the City of Farmersville, not just north of the City of Farmersville as stated. The area of the City of Farmersville that the project will pass through will bisect in half a planned Farmersville Regional Shopping Center and Industrial Park, resulting in a serious impact to the feasibility and the financial success of the Shopping Center and Industrial Park.

I11-1

Page 2-22, Para 2.6 and Page 2-24, Table 2-3
On page 2-22, Para 2.6 states that approximately 8 miles of new 20-foot wide access roads for a total of 2.1 acres would be required. However Table 2-3 on page 2-24 states that a total of 8 miles of 20-foot wide access roads would require 19.4 acres. I believe that the 19.4 acres is probably the correct value.

I11-2

Page 3-4, Para 3.2.2
The routing of the project appears to seriously impact the feasibility and economic success of the Farmersville Regional Shopping Center and Industrial Park by bisecting the center/park in half. This will restrict the size and orientation of the buildings and parking lots in the complexes.

I11-3

Page 4.1-44 and 4.1-45
No mention of the impact of the project on the City of Farmersville's Regional Shopping Center and Industrial Park was made. The project will run through the center of the complex and bisect the complex in half. This could cause a serious financial impact on the success of the complex.

I11-4

William L. Maurer
325 E. Marinette Ave.
Exeter, CA 93221-9782
(559) 592-5595

Page 4.3-13
The "City of Farmersville General Plan (Proposed Project)" section does not include the significant impact of the Proposed Project on the planned Farmersville Shopping Center and Industrial Park.

I11-5

Page 4.12-2, Para 4.13.1
In the Setting, Tulare County Parks section (at the top of page 4.13-2), the Kaweah Oaks Preserve is located northwest of the City of Exeter and north of highway 198, but is not within the city limits of the City of Exeter.

I11-6

Page 5-7, Para 5.3
Under Biological Resources, the EIR states that Alternative 3 presents significant unmitigable impacts to biological resources. In searching for an acceptable route modification to Alternative 3, how wide of a path was searched and evaluated? Was the search path widened to one or two miles on either side of the proposed Alternate 3 path?

I11-7



William Maurer

Mr. Jensen Uchida,
San Joaquin Cross Valley Loop Transmission Project
225 Bush Street, Suite 1700
San Francisco, Ca. 94104-4207

July 22, 2009

Dear Sir,

I know you have worked very hard on this project but I want you to know I am very much opposed to Rt. 2 because:

1. I live on the Route 2. Route 3 is the best route because:
2. It uses more of the existing right-of-way
3. The route's primary negative, the Stone Corral Ecological Preserve, can easily be circumvented by moving the line just a little.
4. There is less damage to intensive agriculture.
5. Routes 1, 2 and 4 have more negative environmental impacts to agriculture communities and people.

Thank you for your consideration.

Barbara Kinley

July 22, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida:

As a resident living adjacent to Edison's Alternate Route #2 and near alternate Route #6, I state the following objections to the plan.

The route would go through a plum orchard across the driveway from where I live. My concerns are the impact on the well water I use plus for the wells in the area. Route #2 removes one well vital to Sentinel Butte Mutual Water Company and two private wells supplying water to a large acreage of farmland. In this area, as the underground water strata tends to flow in narrow channels and in spotty locations, any interference with the fragile water supply would cause severe loss of productivity and livelihood to many. Although Edison is supposed to replace these wells, there is no assurance that due to the nature of water strata in the area that a well of equal volume and quality could be found.

I13-1

I am concerned about the economic fallout on the local farmers, farm workers and agricultural suppliers and other businesses. The total amount of productive fruit and citrus land that would be removed from production for right of way is considerable and a large economic loss. I know at least one family personally that would probably be put out of the farming business.

I13-2

Also, I am concerned about health issues. We already have bad air quality in the valley and the construction and the digging the tubular tower foundation sixty feet deep would put more dirt spores in the air. The dirt spores are a cause of Valley Fever and this would cause a health hazard to those living and working on or near the route. I am recovering from Valley Fever for the second time so this is a concern to me.

I13-3

Route #2 crosses the valley for approximately one and one-half (1 1/2) miles during which five (5) different changes in direction occur. It is at these points that a change to the lattice towers is required. The amount of lattice towers placed in the middle of this beautiful valley would constitute an appalling eyesore. Again the amount of productive fruit and citrus land to be destroyed at each shift is considerable. This problem has not been addressed in the EIR.

I13-4

The planned route through Antelope Valley also poses problems. A section of the line passes directly through known vernal pools. Also, the Antelope Valley is known to the Yokut Indians as their sacred creation site. It is here that they believe they arose from the earth. This must be taken into consideration.

I13-5

I13-6

The objections to Alternate Route #3 because of the vernal pools has been shown to be invalid as a by-pass was not investigated thoroughly enough in the EIR. There is significant evidence being introduced by PACE that a "work around" the ecological reserve is possible and feasible.

I13-7

Please consider the Northern Alternate Route #3 with modifications to be selected as the preferred route.

Thank you for your consideration,

Sincerely,
Elaine Breitbach
Elaine Breitbach
36940-B Millwood Dr
Woodlake, CA 93286

From: Alan Hiatt [haiyatto2003@yahoo.com]
Sent: Wednesday, July 22, 2009 8:16 PM
To: San Joaquin Cross Valley Loop Project
Subject: San Joaquin Cross Valley Loop Transmission Project
Alan Hiatt
19898 Ave 376
Woodlake, Ca 93286

Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94102

July 22, 2009

Dear Mr. Jensen Uchida,

Recently, I became aware that the CPUC is still exploring **Route 6** as well as **Route 2** for the **San Joaquin Cross Valley Loop Project**. As a resident who would be negatively affected by these routes, I would like to express my **strong opposition to both** and would appreciate you forwarding this letter to any and all appropriate individuals.

I14-1

I believe that these two routes will **adversely impact** (construction will produce lots of dust from the ground which is a major cause of valley fever) hundreds of families with lands adjacent to, or near, the proposed routes and **will decrease** their property values. These routes **will destroy** some of the last pristine acreage located on the valley floor. Because of the strict regulations surrounding the construction of these routes, there **will be great loss** of wells, pipelines, wind machines, and drive rows.

I14-2
I14-3
I14-4

Not only will there be a **great economical burden** (lost of wells and the water they provide for orchards and other crops) placed on the residents involved but the historical value of the Native American village and burial sites along with the early pioneer sites **will be greatly impacted**.

I14-5

Since **Route 3**, a more northern route affecting a very small number of residents with almost no agriculture, has been planned, I would **suggest strongly** that this **Route 3** be selected because it will be the most effective and cause the least nuisance to the residents of the valley. It would be the least costly because it would **generate the most goodwill for the Edison Company**.

I14-6

Thank you for your attention and serious consideration of these concerns.

Sincerely,

Alan Hiatt

Duplicate Letter

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida:

I am writing to express my concerns regarding the San Joaquin Cross Valley Loop Transmission Line. I feel that Route 3 has not been fully explored and is the best possible route. It uses more of the existing right-of way and there is less damage to intensive agriculture.

Routes 1, 2 and 6 have more intense negative environmental impacts to agriculture, communities and people. There are many 4th & 5th generation farming families that would be impacted to the point of losing crop land and going out of business. There are also the issues of Native American artifacts and the esthetics of a productive agricultural valley.

I urge you to consider Route 3 as a more viable route for the line making adjustments to work around the sensitive habitat in the Stone Corral area. This route would significantly reduce impact on populated areas, thus reducing any adverse effects from the presence of the lines and towers.

I respectfully submit this as my objection to Routes 1, 2 and 6 and offer my suggestion that Route 3 be thoroughly reconsidered.

Respectfully,

Richard Marshall
Richard Marshall
1622 E. Sunnyside Ave.
Visalia, CA 93292

115-1

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida:

I am writing to express my concerns regarding the San Joaquin Cross Valley Loop Transmission Line. I feel that Route 3 has not been fully explored and is the best possible route. It uses more of the existing right-of way and there is less damage to intensive agriculture.

Routes 1, 2 and 6 have more intense negative environmental impacts to agriculture, communities and people. There are many 4th & 5th generation farming families that would be impacted to the point of losing crop land and going out of business. There are also the issues of Native American artifacts and the esthetics of a productive agricultural valley.

I urge you to consider Route 3 as a more viable route for the line making adjustments to work around the sensitive habitat in the Stone Corral area. This route would significantly reduce impact on populated areas, thus reducing any adverse effects from the presence of the lines and towers.

I respectfully submit this as my objection to Routes 1, 2 and 6 and offer my suggestion that Route 3 be thoroughly reconsidered.

Respectfully,

Bernice Marshall
Bernice Marshall
1622 E. Sunnyside Ave.
Visalia, CA 93292

July 20, 2009

P.O. Box 1
Lemon Cove, CA 93244-0001
July 22, 2009

Dear Mr. Uchida,

Mr. Jensen Uchida SJXVL Project (08-05-039)
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

My name is Terrance Peltzer; I currently farm 1500 acres of citrus in Tulare County with my family. I strongly oppose Routes 2 & 6 and would like you to reconsider Route 3 for the following reasons:

Dear Mr. Uchida:

- We do not know the impact associated during the construction phase or how agricultural lands will be impacted. I16-1
- We do not know the impact of construction and the GHG emissions that will result from the construction. We know that Greenhouse Emissions must be part of all environmental studies and reports. From what we have read the EIR does not adequately address these issues. I16-2
- Also in reading your report you do not take into consideration the cultural practices for ag and impacts/disruption to activities like pest abatement, aerial applications and dust control management which may be restricted greatly under or around the transmission lines. I16-3
- The EIR does not appropriately address the impact that our agricultural lands will have in regards to irrigation. Our land will be significantly impacted, the feasibility of us being able to relocate or replace the wells will be extremely costly and in some cases impossible. I16-4
- If we loss acreage it will ultimately affect the quality of life on rural families and farm properties due to route impact. This would reduce profitability and may eliminate jobs in the community. I16-5
- According to EIR (as stated on 3-15) Route 3 would meet both the basic project objectives, and meets all legal, regulatory, and technical feasibility criteria. As proposed in Route 1, Route 3 would result in fewer acres of farmland being removed permanently. The impacts would be similar on Cultural Resources as to the Proposed Route (Route 1). Route 3 only major issue is due to the vernal pools, which PACE has figured out an alternative to address this. I16-6

We commend your planning and design acumen in the recommendation of the utilization of an existing right-of-way. This concept reduces EMF exposure to nearby residents of the existing line by more than 80%, provides APLIC*approved lines more friendly to all avian species, especially large raptors, and places the perceived burden on those who reap the greatest benefit from the line. The major shortcoming is that it does not extend farther to the north, to areas void of habitation and cultivation, thus fully exploiting the existing right-of-way through the valley floor. What assurances do we have from Southern California Edison Corporation that the existing lines, as they approach their 100 year anniversary, are compatible with the environment which has grown up around them? Quite bluntly, are they safe? Perhaps this is an investigation germane to the environmental process, as should deficiencies be discovered, those facts would have a bearing on the decision making process. In light of the fact that the Rector-North right-of-way will need rebuilding at some point in the future, arguments against its utilization fall largely on barren ground. Even so, the need for integrating this corridor into the City of Visalia's urban fabric should be given much consideration. To your Division's credit, and in large part due to your commitment to spending time in our area, countless hours of local collaboration and fact-finding have been devoted to arriving at a solution to this problem that is practical, equitable and that will withstand the immutable judgement of time. You will hopefully hear much about a locally developed work-around which avoids the impediments outlined in the Draft EIR for Route 3. This Route 3A plan, with its improvements, is consistent with common sense, State policy, and the principals of good design and conservation. Cost criteria design is a false bargain. The alternatives only provide us with low initial cost, and make no mention of the bills that will have to be paid in the future: bills of mediocrity, bills of divided communities, and bills of damaged farms, neighborhoods, and vistas. The bills for poor design will keep on coming and never be paid in full. I17-1

Finally, there is a matter of some errata or inconsistencies in the Draft EIR. The Draft is in error in that it states that no daycare facility exists within ¼ mile of the Proposed Project. In at least one instance, a state-licensed one exists, and has existed for some years at 2490 Filbert Street in Exeter, approximately 500 feet from the centerline of Proposed Route 1. The Draft also fails to carefully delineate the routes and elevations of the myriad gravity-delivery agricultural water systems of the area, while simultaneously requiring 3 feet of cover over all utilities under the right-of-way. This may not be feasible with gravity-delivery systems. Additionally, in the Draft description of the land use planning policies, it states that no homes in Lemon Cove would be located to the south of the alignment. In fact, there are more than a dozen homes to the south and southeast of Proposed Route 1. We thank you for your continued diligence and scrutiny of this project. I17-2, I17-3, I17-4

Thank you for your consideration.

Respectfully Submitted,

Terrance M. Peltzer
Terrance M. Peltzer

Sincerely,
Bill and Peggy Pensar
Bill and Peggy Pensar

* Avian Power Line Interaction Committee

GEORGE WALTON
PO Box 373
EXETER Ca 93221
559-7888340

Jensen Uchida
225 Bush Street Ste 1700
San Francisco Ca 94104-4207

Dear Mr. Uchida

I am in receipt of a copy of the Draft Environmental Report on the San Joaquin Cross Valley Loop project of June 2009 A 02-05-039 SCH E008081070. I am a property owner in the direct path of the proposed SCE route 1 so I have been following this matter closely. The report finds alt Route 2 as the least impact on the areas studied. While I am glad attention has been turned anywhere else than on the Route 1 that I am located on, I still feel a way must be found to place this project on alt Route 3. I understand there are environmental issues connected with this route but the impact on this region both now and in a foreseeable future makes this the best choice if these issues can be somehow resolved.

I18-1

I know there has been alot of effort put into this project and I hope a way can be found leading to a Route 3 choice

Sincerely

George Walton

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Jimmy Alley Date/Fecha: July 23, 2009

Address/Dirección: 20600 Sentinel Drive / Woodlake

Comment/Comentario: _____

This project is a stink!

I19-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto

Paper Copy/Copia Impresa

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Ralph Alley Date/Fecha: 7-23-09

Address/Dirección: 20600 Sentinel Drive / Woodlake

Comment/Comentario: Being the owner of one of the oldest ranches in the area, I have tried to keep the land as close to the original "foot print" as possible. This project will destroy the atmosphere of the historical value and concept of the area, and will be an overlooking eyesore for everyone who values the historical aspect of the area. There still remains MANY Indian artifacts and these will forever be lost by this needless and thoughtless project. With technology available for wind power and solar power, there is NO NEED for such an ugly, invasive, destructive "adventure". There are many burial grounds of our American Indians former residents of the area. These will be disturbed. There is no way to undo the harm this act will do, and no way to tell their modern day relatives "We're sorry"!!!

I20-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

July 23, 2009

To the board of Public Utilities,

I recently became aware of a proposed High voltage electrical power line that is to run across a portion of productive agricultural land and feel I should be concerned for the following reasons. Agricultural land is more than the small mom and pop farmsteads of the past. Small acreages have been combined to become efficient farms of larger acreages and more efficient in production. This means better use of resources, available space, energy and water. I work for just such a company. Our use of these resources has allowed us to farm better, producing a better crop that is marketed domestically and internationally. The loss of this productive farming land would greatly diminish our endeavor to produce a crop. We are farming as a livelihood and as a public service. We employ hundreds of people, both in the cultural and farming portion of our farm and also indirectly through marketing sales and distribution. Many people depend on the kind of intense farming we do so that they can support their families and lifestyles.

I21-1

Having a background in the science community, formerly working in the Dept of Land Air Water resources, I am very aware of the limited resources that are available to farm these days. Water quality, Soil quality and Air quality issues affect all of us. The efficient use of these limited resources means those farming operations that can farm intensely will be the farms of the future.

The water we use isn't a stream or a river. Our water flows in a meandering underground stream that can be found at different depths and is of different qualities throughout the foothills and surrounding valleys. Efficient use of this water is the backbone to our success. Your placement of large cement pads that may or may not interfere with this water that flows from the Sierra foothills is of vital concern. I am concerned that inadequate studies have not taken into account the impact of such a disruption of this water flow or aquifer recharge. The water resource is of the greatest concern of the farming community. The loss of this resource due to negligence of the land would potentially harm future farming in this productive valley.

I21-2

I feel we need to have an intensive, extensive environmental study done before you consider route two. We need this because would impact the future as well as the present use of our valuable resources water and its routes below ground.

Chris Corbett,
1500 west Beverly Dr,
Visalia, California

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

July 23, 2009

Dear Mr. Uchida,

I believe the attached map, as provided by the CPUC and published in our local newspaper, is a "picture that's worth a thousand words." It can clearly be seen that Alternative 3 is the one with the least negative impact on agriculture, communities, and people. In fact, it goes through no communities, and only affects rangeland, not farming at all! I noticed in the DEIR that there was a valid concern regarding wetlands and vernal pools, but these could easily be circumnavigated, with only a slight adjustment of the route.

I know that it is nearly impossible for you to visit every site you make decisions on, but I would greatly encourage you to come out and have a look at this one. My husband and I often drive up Highway 245, and where Route 3 would be located is a perfect compromise of being reachable for repair and maintenance purposes, yet isolated enough so as not to be a problem. Public-relations-wise, it's a dream!

We appreciate the time you take to consider this more northern route; it is a crucial matter for us as the farming lifestyle of our little community of Elderwood is at stake.

Again, thank you for your consideration,

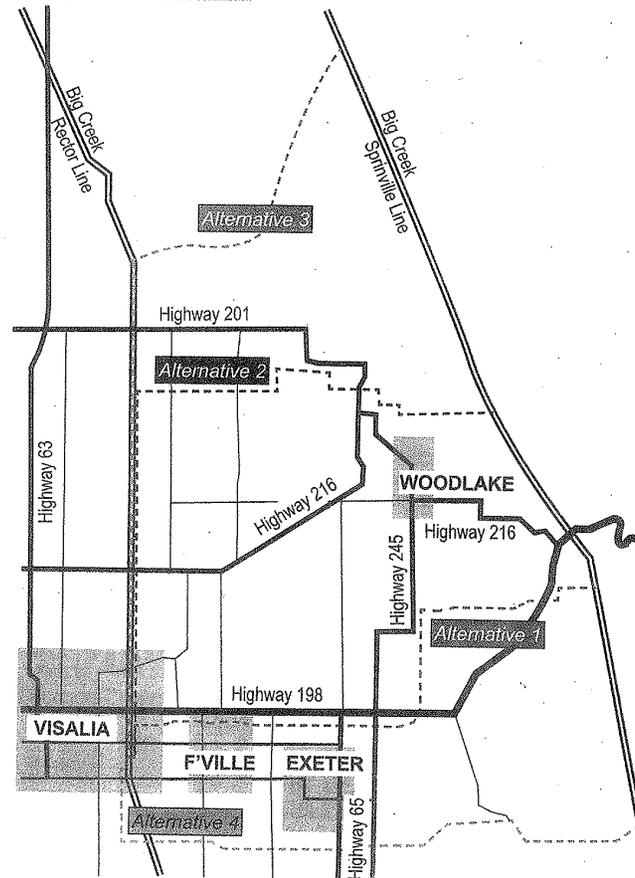
Gary and Rebecca Davis
Rebecca L. Davis
Gary and Rebecca Davis
37930 Rd. 200
Elderwood, CA 93286

I22-1

WEDNESDAY, JULY 15, 2009 Sun-Gazette

San Joaquin Valley Cross Transmission Loop

SOURCE: California Public Utilities Commission



Jacob Deitz
20829 Ave. 380,
Elderwood, CA 93286

Mr. Jensen Uchida
c/o Environmental Science Associates
225 Bush St. Suite 1700,
San Francisco, CA 94104-4207

July 19, 2009

To Mr. Uchida:

Hello, my name is Jacob Deitz. I am writing to you on this fine July day about the Southern California Edison lines proposed to reside in my quaint little town. Sir, I know that you are taking time out of your busy schedule to read this letter, so I won't waste your time. In Elderwood, also known as the proposed route 2, we had a person come and work on an EIR. I don't know how much this affects the citizens of San Francisco, but the power lines would greatly hurt my town.

Currently we are in a drought. I do not think the power lines will help, if it doesn't hurt our current situation. Elderwood is a city comprised of farmers and cattle ranchers. If we lose water, needless to say, we will lose nearly half the jobs of our simple citizens. As a fourteen year old, I am not an expert on your power lines, but I know two things. One must drill at least sixty feet to anchor an object so massive. Two: Elderwood doesn't use SCE, we use PG&E. I don't know about you, but I don't like having sixty foot tall eyesores that we aren't even going to be able to use!

An organization, PACE, has found another alternate route for you. Please, Elderwood pleas for you to look at this route before you make a decision on the poles. If you don't change your mind I fear the worst for Elderwood.

In 1988, the California legislature passed Senate Bill 2431 (Chapter 1457, Statutes of 1988). I would like you to include these in your decision, if at all possible.

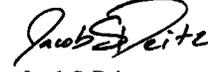
1.) Encourage the use of right-of-way by upgrading existing transmission facilities were technically and economically possible.

This statute points to the Rector Lines. They are old, loud, and dangerous. Wouldn't it just be easier to upgrade those? This is the only the first of three sub statues but this one is the most important. The Rector line uses more of the right-of-way on route 3 than on route 2.

↑
I23-3
cont.

Thank you for reading my letter, and hopefully you will rethink the situation.

With all due respect,



Jacob S. Deitz

I23-1

I23-2

I23-3

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Melissa Deitz Date/Fecha: 7-23-09

Address/Dirección: 20829 Ave 380

Comment/Comentario: _____

After hearing the many comments, water, wells, effects of the lines on people & wildlife, I strongly encourage the alternative route 3. In addition, I will be contacting the tribal council in order to further investigate the sacred land which will be affected, negatively, by routes 2 + 6.

I24-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
Environmental Science Associates
225 Bush Street
Suite 1700
San Francisco Ca. 94104-4207

July 23, 2009

Good evening, my name is Joe Ferrara, the purpose of this statement is to provide comment regarding the DEIR that has been prepared on the Southern California Edison San Joaquin Cross Valley Loop KV Transmission Line Project. My wife Mary and I are landowners adjacent to the Proposed Route 1. I am a member of a farming family that has farmed in the Exeter to Lemon Cove corridor for ninety years. I believe that my general knowledge of this area and the hydrological issues that are specific to this area give me the necessary background to make the following observations and statements. I appreciate the opportunity to speak to you this evening.

In reviewing the DEIR that has been prepared for this project I was pleased to note the recognition of wells, pipelines and other structures (etc-----) in section 4.7-11 that will be impacted by the proposed Route 1 ROW. My concerns are with the general statement found in the DEIR (section 4.11a and 4.11b) concerning mitigation measures that would be implemented to address these concerns.

It is my experience and observations that lead me to believe that the general statement concerning the engagement of a qualified water well drilling contractor to relocate those impacted wells and thus mitigate this issue is much too a simplistic approach. I believe many of the wells within and in close proximity to the ROW on Proposed Route#1 can not be duplicated and thus mitigation will not be possible as described in the statement as presented.

It is general knowledge in the local agricultural community that any attempt at well drilling in locations east of Road 196 to the north, northeast, east and southeast of Exeter can yield very mixed results. This area has been an established permanent crop area dating back to the early 1900's, but total

I25-1

development of the area did not occur until after the formation of the Exeter Irrigation District in the late 1930's and the completion of the Friant-Kern Canal in the early 1950's. These events brought the addition of surface water to the area to help stabilize the overdraft of the underground aquifer.

In attempting to drill a replacement well , it is not an uncommon experience to move over 50 feet from what has been a productive well for fifty to seventy years and drill what we describe as a "duster" or dry hole. It is not uncommon to drill several such holes and not find a location that provides the quantity of water that was available in the original location. This was the experience of many farmers in the early development period, and that was the reason that much of this area was not developed until supplemental water was brought into the area.

Unlike the farming areas between Exeter and Visalia, the aquifers to the east and northeast of Exeter are very shallow, small in volume and specific in location. The general geology of the area does not allow for deep drilling in many instances. The wells in this area typically have volume yields in the one hundred to three hundred gallons per minute range. The development of low-volume irrigation technology gives us the ability to utilize these small volume wells to successfully farm the permanent crops that you find in our area. We are fortunate to be able to supplement these wells with Exeter Irrigation District (EID) water or other surface water sources to help stabilize our ground water levels. Reports show average static groundwater in 1921 was 59 feet, in 1947 static groundwater at 105 feet and the most recent measurements within the Exeter Irrigation District show an average of 65.9 feet.

Recent Federal Court rulings, continued litigation, and environmental settlements have the potential to reduce the total amount of supplemental water available to this area. These issues, along with continued drought conditions threaten are ability to maintain adequate ground water for our crops.

All of the issues above mentioned lead me to be very concerned about the thought of the abandonment of a good, well proven , productive well that has given good service to a farmer for many years. We are

I25-1
cont.

always concerned that such a well will collapse, or for some other reason become nonperforming .The fear that a replacement well will not be as productive is a reality that we all face. We do not have the luxury to just move over a few feet and drill a replacement well of like quantity. Several attempts may be necessary to replace a current productive well with no guarantee that a new equally productive well will be developed.

The moving of pipelines, pumping stations and other filtration equipment necessary to deliver water to our crops are also concerns that are mentioned in the mitigation measures. There is no mention of the possibility that it may take more than one well to replace an existing well. The need for an additional well or wells could require a total redesign of an irrigation system. There is no mention of the added long-term costs associated with additional equipment that may be necessary. These costs would include, but not limited to, additional maintenance, power costs and additional SCE standby charges.

I think it is important to note that there has been no mention of the Exeter Irrigation District's distribution system. The District encompasses approximately 12,700 irrigated acres, and also includes the majority of the city limits of Exeter. Exeter Irrigation District is comprised of approximately 15,200 acres in total. The entire system includes approximate^{sixty} miles of underground pipeline ranging from twelve inches to forty-two inches in diameter. The depth of the District pipelines range between five feet to fourteen feet. The district has approximately four hundred sixty-eight meters, serving three hundred ninety customers. In addition, the District has many turnouts, air vents, pumping stations, and reservoirs as part of the infrastructure. Total replacement cost for the district infrastructure is estimated to be at least one hundred million dollars. The proposed SCE Route 1 runs adjacent to, crosses several times and is in close proximity of District pipelines and above ground infrastructure. A thorough survey of the impacts that the proposed route would have to the entire Exeter Irrigation District's distribution system needs to be conducted. In discussions with Exeter Irrigation District management I have been

I25-1
cont.

I25-2

I25-3

informed that no inquiries by either Southern California Edison Co. or Environmental Science Associates have been made concerning any potential environmental impacts that proposed Route #1 would have to the Exeter Irrigation District. This system was professionally engineered, and designed by the Bureau of Reclamation. The infrastructure of the Exeter Irrigation District has served the agricultural community of this area for almost sixty years. Major design changes to the underground pipelines or above ground infrastructure that would impact the ability to deliver water efficiently would have to be mitigated.

I25-3
cont.

I also have concern that in statement areas 4.7-11 and 4.7-11b there is no mention of wells that are adjacent to, or in close proximity to the proposed ROW. There is real concern that there are many wells that are just outside of the ROW that will be impacted because of the future inability to have them worked on due to the potential of induced voltages. There seems to be contradictory information within the text of the DEIR about distances required for work and maintenance. We also continue to get indications from our pump service contractors that lead us to believe that their insurance requirements exceed the Cal OSHA Title 8 requirements mentioned in the DEIR. I believe that the area just outside of the ROW will have as many impacted infrastructure issues as exist under the proposed ROW. I believe a complete study of this issue is a necessity.

I25-4

I feel that a complete review of the hydrology of the area east and northeast of Exeter along the proposed ROW is a necessary addition to the EIR for the Proposed Route 1. I also believe that my concerns that center on a landowner's ability to service equipment, wells or do pipeline work that are adjacent to, as well as, within the proposed ROW should be studied. Detailed descriptions of what is allowable should be included in the final EIR. The Exeter Irrigation District, Friant Water Authority, Kaweah Delta Water Conservation District, Bureau of Reclamation, Lemon Cove Ditch Co., Wallace

I25-5

Ranch Water Co., and Foothill Ditch Co. should all be consulted on the environmental impacts that Proposed Route 1 will have on the infrastructure, and operations of each of these entities.

I25-5
cont.

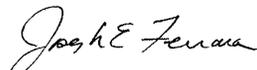
I have used as sources of information many reports, studies, and publications concerning the geology and hydrological issues of the area that the Proposed Route 1 travels across. To assist in your discovery of environmental impacts to the ground water along Proposed Route 1 I believe that these same reports, studies, and publications would be helpful in development of the Final Environmental Impact Report for this project. The reports are: 1.) "Technical Studies in Support of Factual Report Exeter Irrigation District" by United States Department of the Interior, Bureau of Reclamation Region II, November 1949. 2.) "A Report on the Feasibility of Water Supply Development" East Side Division Central Valley Project California, by United States Department of the Interior, Bureau of Reclamation, Region 2, Sacramento, California 1962. 3.) "Five Year Water Update, Agricultural Water Management Plan", Exeter Irrigation District, December 2004. 4.) "Water Resources Investigation of the Kaweah Delta Water Conservation District, Final Report" December 2003, Revised July 2007 by Fugro West, Inc. 5.) "Report on Investigation of the Water Resources of the Kaweah Delta Water Conservation District" by Bookman and Edmonston, February 1972. 6.) Estimated Costs To Replace Existing Water Wells, Pump Electrical Service, Deep Well Turbine Pumps, Irrigation Filter Stations, Booster Pumps and Pipeline Infrastructure by Kaweah Pump, Inc. July 2009. 7.) Exeter Irrigation District Depth to Static Groundwater Report, February 2009. I would be pleased to assist you in obtaining these reports and publications, if needed. I would also like to deliver tonight a report of the depth to static groundwater measurements made by the Exeter Irrigation District starting in 1953 to the present, and a map of the Exeter Irrigation District.

I25-6

It is my belief that your investigation of the fragile groundwater conditions that exist on the Proposed Route #1 is just beginning. The hiring of qualified well drilling contractor is not the solution to mitigating

many of the well locations that will be impacted by the proposed route. I feel that many of these wells can not be duplicated. The loss of a good productive well will cause the loss of highly productive agricultural ground, and leave the property owner with a devalued piece of property.

I urge the continued search for a way to mitigate the environmental issues on Route #3, as stated in the filings by PACE (July 20, 2009). The modification of Route #3 to avoid the environmentally sensitive areas cited in the DEIR would allow for the maximum use of the existing SCE Right-of-Way, which is the intent of Senate Bill 2431 (SB2431, Chapter 1457, Statutes of 1988, Garamendi), "Garamendi Principles". Route #3 is still the most logical route and is in the best interest of the state. Thank you,


Joseph E. Ferrara

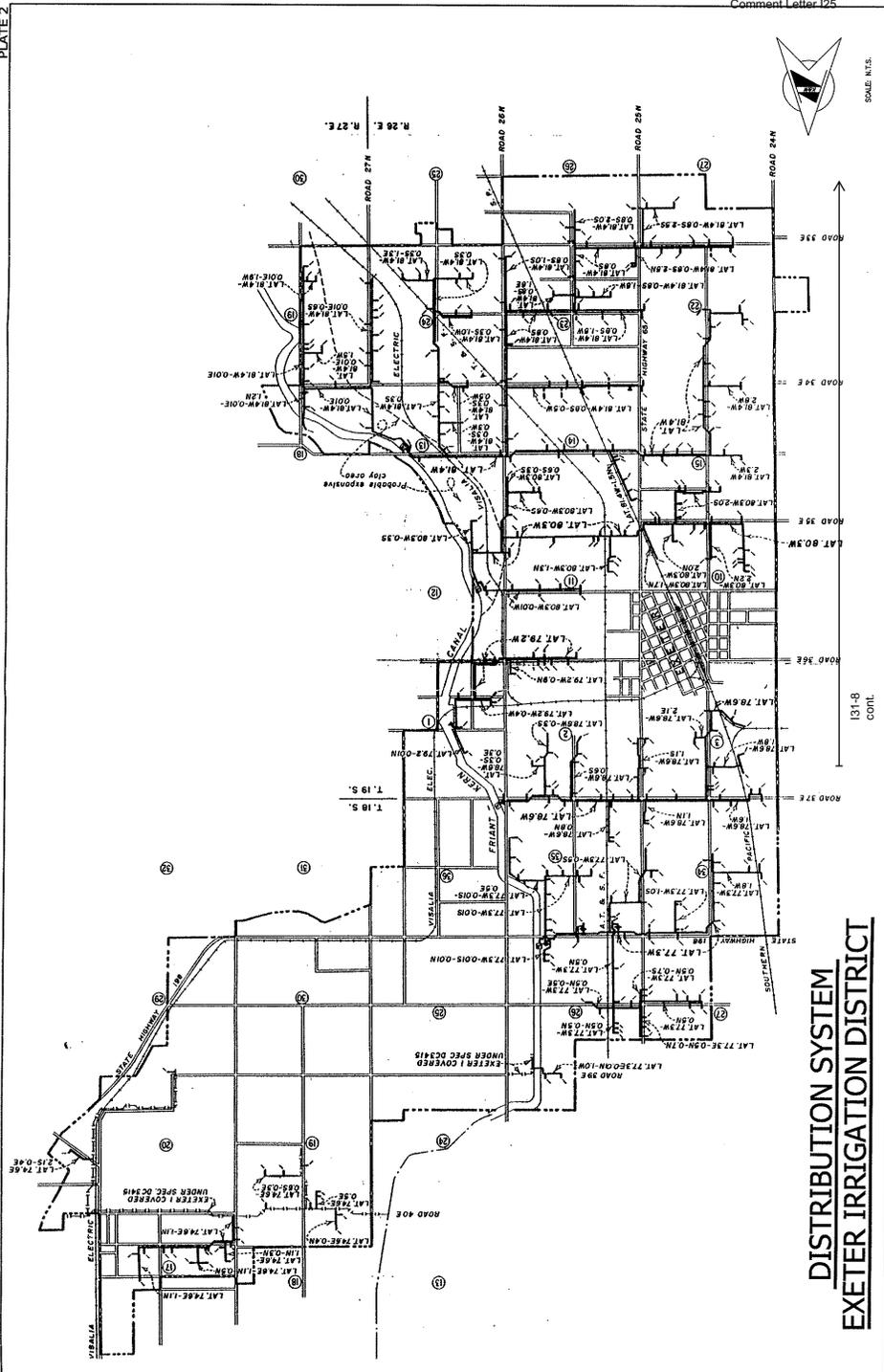
Joseph E. Ferrara
3305 N. Gill Road
Exeter, Ca. 93221
559-592-9393

I25-7

EXETER IRRIGATION DISTRICT
DEPTH TO STATIC GROUNDWATER

YEAR	SPRING (FEBRUARY) MEASUREMENTS			FALL (OCTOBER) MEASUREMENTS		
	North of Ave. 288 T18S Depth to G.W. (Ft.)	South of Ave. 288 T19S Depth to G.W. (Ft.)	DISTRICT Depth to G.W. (Ft.)	North of Ave. 288 T18S Depth to G.W. (Ft.)	South of Ave. 288 T19S Depth to G.W. (Ft.)	DISTRICT Depth to G.W. (Ft.)
1953			108.0			
1963			74.5			
1970	27.5	59.3	46.4	35.4	64.4	52.3
1971	30.7	59.0	47.5	39.3	64.6	54.1
1972	34.0	59.8	48.7	48.9	69.1	60.6
1973	39.6	61.8	52.2	40.8	61.1	53.3
1974	30.7	54.3	43.9	40.0	58.4	51.3
1975	34.0	53.2	44.6	40.8	59.9	51.9
1976	39.5	55.9	48.3	48.4	65.0	58.0
1977	45.1	59.8	53.2	66.4	79.1	73.5
1978	53.5	71.2	63.2	40.6	65.1	54.2
1979	36.3	58.2	48.3	46.2	61.4	55.2
1980	37.8	54.4	46.9	37.1	53.8	47.0
1981	35.0	50.2	43.7	45.5	60.3	53.6
1982	37.2	51.6	45.4	35.8	51.8	44.6
1983	28.2	45.1	37.4	27.2	39.1	33.8
1984	22.1	35.0	29.1	31.5	41.3	37.4
1985	27.6	36.5	32.4	38.8	47.5	43.7
1986	33.2	40.9	37.3	33.1	38.8	35.8
1987	32.0	37.5	34.9	44.1	49.0	46.6
1988	37.5	44.8	41.4	50.6	54.1	52.5
1989	45.6	52.2	49.2	56.8	60.9	59.0
1990	50.7	57.8	54.5	67.2	71.6	69.6
1991	61.0	68.9	65.2	65.8	74.5	70.4
1992	55.1	69.2	62.5	66.6	79.4	73.5
1993	56.3	73.7	65.5	53.1	73.9	63.6
1994	46.9	67.8	58.3	58.0	78.2	68.8
1995	48.8	72.8	61.5	41.3	69.1	56.0
1996	37.7	65.0	52.1	41.3	66.4	54.3
1997	34.9	61.5	48.9	37.1	63.0	50.0
1998	33.0	59.0	46.0	28.3	54.2	41.3
1999	25.0	50.4	38.6	30.9	53.3	42.1
2000	30.6	51.3	42.3	33.1	53.1	43.7
2001	30.7	50.9	41.2	40.1	59.3	50.3
2002	35.8	55.3	45.6	44.3	63.7	54.4
2003	40.2	59.3	50.1	48.4	68.5	58.9
2004	43.8	63.5	53.8	52.4	72.3	63.6
2005	48.0	68.9	58.8	51.0	73.3	62.8
2006	48.0	68.7	56.9	44.8	71.3	58.6
2007	50.0	73.4	61.9	57.1	79.9	68.5
2008	50.0	75.4	63.2	60.5	83.3	74.2
2009	51.4	78.9	65.9			

I25-8



DISTRIBUTION SYSTEM
 EXETER IRRIGATION DISTRICT

Draft Environmental Impact Report Comments

From: Joyce Frazier, 19599 Ave 376 [P.O. Box 713] Woodlake, CA 93286

It is clear from the report that there are no good alternatives to the location of the Cross Valley Loop [note all non-line alternatives have been rejected not withstanding the Nation's need to produce clean energy] Anyone in its path will be severely impacted aesthetically, culturally, and agriculturally, and biologically, with a permanent unmitigable increase in air and noise pollution resulting from the installation and maintenance of the line.

The fault in the report is that it so blithely mitigates with words the actual damage it reports. For example, in the Biological resource section, it acknowledges that Route 2 is home to the fairy shrimp, vernal pools, special status plants like Hoovers spurge, the western spadefoot frog just like Route 3. Somehow, with "mitigation", the report wipes out Route 2's ability to claim a Class 1 classification - while retaining that category for Route 3 simply because one mile of the Stony Corral reserve is encroached upon. It would appear as is often stated in the report, that the actual transmission line path is not final for any of the alternatives. Hence, it can be changed. It would be possible to "mitigate" the biological Class 1 effect on Route 3 by simply going around Stony Corral. At that point, as in any chess game, we would be equally impacted biologically speaking and there would be no preference for Route 3.

126-1

One highlight of the report showing some intellectual honesty, was the finding that Route 3 has the least impact on agriculture primarily due to the remoteness of the area and the lesser amount of farmland affected [16.7 acres]

Another highlight in the report is EIR's acknowledgement that while it identified Route 2 as environmentally superior alternative, **it was possible that the "Commission could balance the importance of each impact area differently and reach a different conclusion.**

Indeed this letter attempts to encourage that rebalancing. I strongly disagree with the report's conclusion that choosing Alternate Route 2 would "have a minimal long-term impact on residents or other sensitive land uses."

126-2

The report itself acknowledged Class 1 irreparable harm to Route 2 farm land which includes 9.5 acres of prime farmland, 0.6 acres of farmland of statewide importance and 13.8 acres of unique farmland for a total of 23.9 acres. In comparison, Route 3 loses only 6.6 acres of prime farmland, 0.9 acres of farmland of statewide importance, and 9.2 acres of unique for a total of 16.7 acres.

The report erroneously downplays the effect on Woodlake residents adjacent to the proposed powerline. **I am directly in the path of the Route 2 powerline and do not believe that the effect will ever be minimal.** The proposed line will pass within walking distance of a number of rural residences, including mine. It will be impossible to ignore, get used to, or avoid day after day and year after year. Clearly Route 3 has less impact on housing and population and should be selected as the preferred route.

Another weakness in the report is to downplay the effect on human health of the hazards of living in close proximity to such a huge electric and magnetic field year after year, day after day. Even though PG&E and the California Public Utilities Commission seem content to "mitigate" rather than eliminate the risk, Appendix B of this report notes that three CDHS scientists in 2002 felt that to "one degree or another" they believed that EMFs can cause some degree of risk of childhood leukemia, adult brain cancer, Lou Gehrig's disease, and miscarriage. Similarly, in 2002, the World Health Organization's (WHO) IARC concluded: "ELF magnetic fields are possibly carcinogenic to humans" based on consistent statistical associations of high-level residential magnetic fields with the doubling of risk of childhood leukemia.

In Conclusion

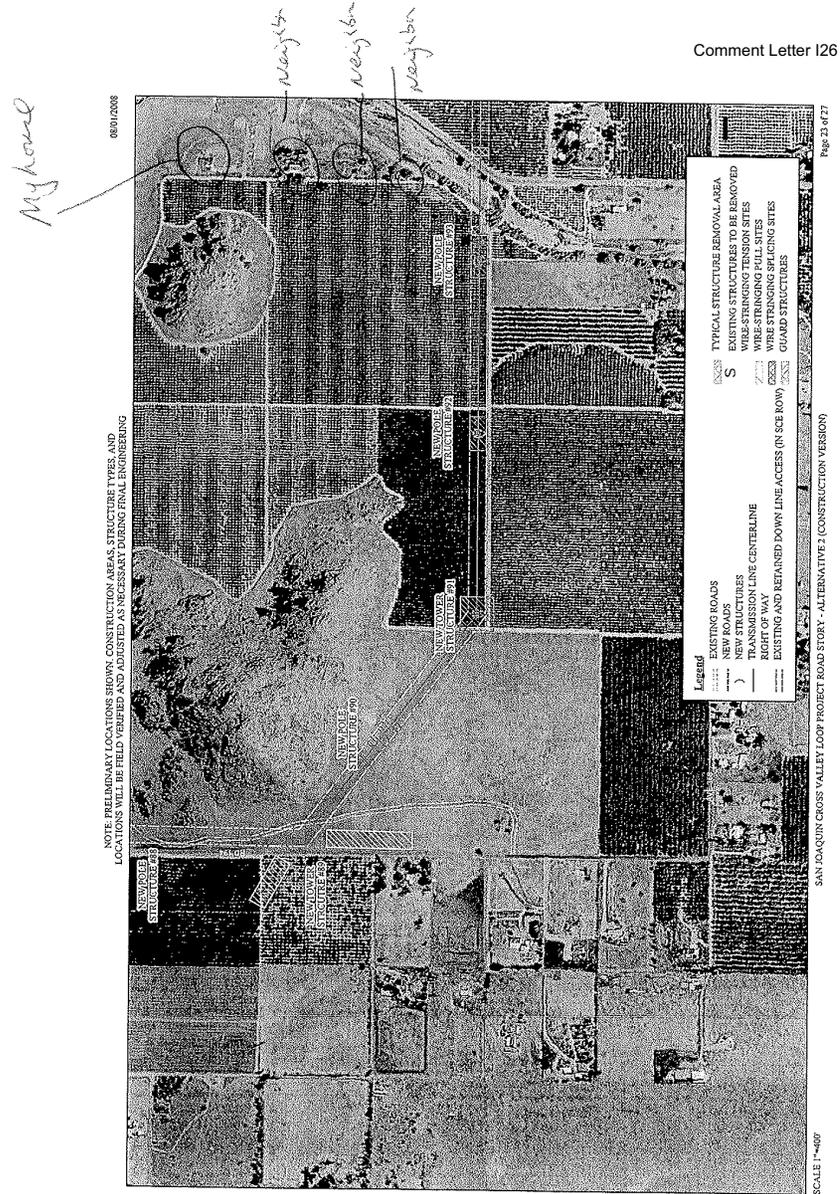
In selecting the appropriate route, this commission should rebalance the equation and select Route 3 as the preferred route because of the substantial unmitigated impact on agriculture and human life along Route 1, 2, and 6. A simple rerouting of Route 3 in relevant locations would mitigate to Class 2 any impact on the fauna and flora located in the Stone Corral Ecological Reserve.

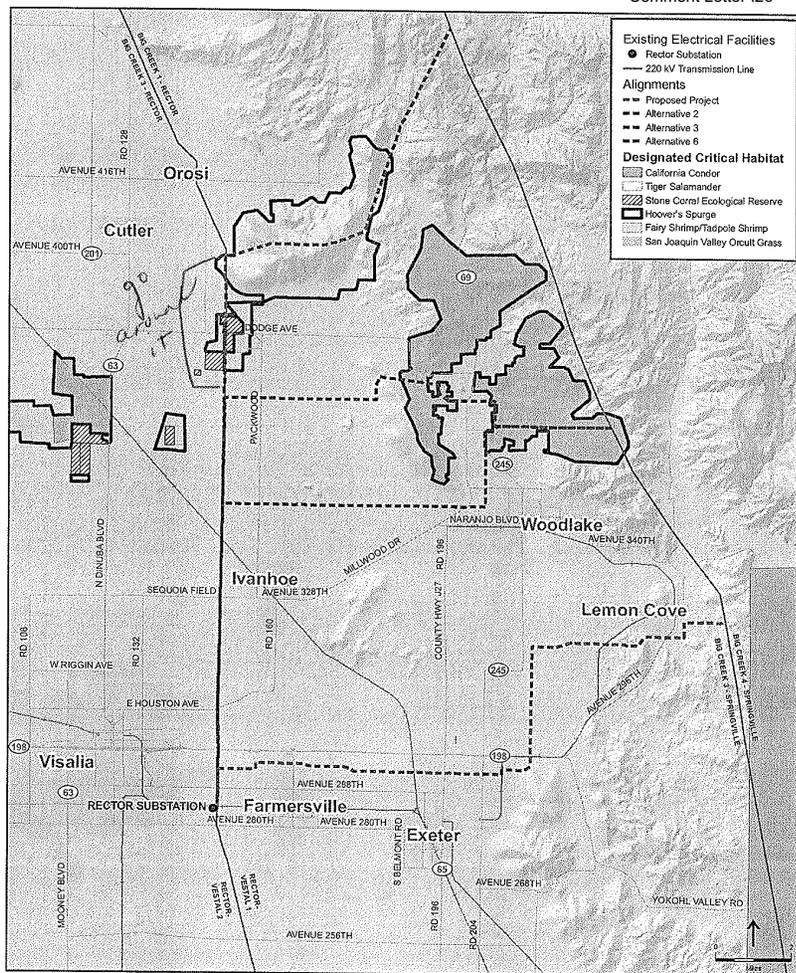
Date: 7-23, 2009

Joyce Frazier
 Joyce Frazier

I26-3

I26-4





SOURCE: ESRI, 2008; SCL, 2008; Thomas Bros. Maps, 2008; USFWS, 1993, 2005, 2006, 2008; CDFG, 2008

San Joaquin Cross Valley Loop Transmission Project, 207584.01
Figure 4.4-4
 Designated Critical Habitat

July 23, 2009

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop Transmission Project
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, Ca 94104

Dear Mr. Uchida:

We are residents and citrus growers in the Elderwood District near Edison's Alternate Route #2 and alternate Route #6; we state the following objections to the plan.

The proposed Routes #2 and #6 place our water supply in great jeopardy. It removes one well vital to the district water supply and two private wells. Our ability to farm depends on the availability of a dependable source of water. Any interference with the fragile water supply would cause severe loss of productivity and a great economic loss.

I27-1

The Cross Valley Loop will impact the community as a whole. Economic impacts to individual farmers or landowners will ripple through the entire community affecting farm workers, agriculture-related businesses, local stores, tax revenue, services, restaurants, and others. Agriculture land taken out of production harms the entire community.

I27-2

After reading the draft environmental impact report Northern Route Alternate #3 would result in fewer acres of farmland removed, the only major issue are the vernal pools and by doing a line adjustment the problem can be solved.

I27-3

Thank you for your consideration.

Sincerely,

Jose Luis Gutierrez *Rose Ann Gutierrez*

Jose Luis and Rose Ann Gutierrez
 36601 A Millwood Dr.
 Woodlake, Ca 93286

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Terri Hacbian Date/Fecha: July 23, 2009
Address/Dirección: 19839 Ave 364

Comment/Comentario: I strongly believe that there has not been enough research done in regards to the economical impact in regards to this project. There are way too many negative factors involved with these issues in regards to any other route besides the route 3. The fact that these powerlines would take precedence over humanity is an absolute abomination. I believe that there should be consideration to the environment, but I also believe that going as the human population is not going to stop, then there must be balance. We must consider the impact on the monetary effect all the way around. The people that are putting these lines in are guaranteed a pay check. Are the people that stand to lose so much being given the same consideration?

128-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Nancy Namlin Date/Fecha: 7-23-09
Address/Dirección: 136258 Rd 196 WALK CA.

Comment/Comentario: I feel route 39 would be the best route with fewest impact on farming-family + economy.

129-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

SAN JOAQUIN CROSS VALLEY LOOP PROJECT ROUTE #2 and #6

BOB'S VIEWS

Bob Hengst

37900 Millwood Dr.

Woodlake, CA 93286

(559)564-8533

July 23, 2009

Over 100 years ago my maternal grandparents Abe and Bertha Dinkins purchased from Bertha's stepfather, Jason Barton, thirty acres north of Woodlake in a community called Elderwood. On these thirty acres they planted citrus and thus began a long time family farming enterprise.

Around this same period, my paternal grand-parents Herold and Marie Hengst homesteaded property on the North Fork of the Kaweah River in Three Rivers and started a cattle and hog enterprise.

Over the years more acreage was added in the Elderwood area. Various crops were grown including citrus, grapes, cotton, beans, peas, pasture, oats, barley, corn, alfalfa, cattle, hogs, and sheep.

Some years after my parents Harold and Wilma were married, they sold the Three Rivers North Fork property and bought property from the Sentinel Butte Corporation. Part of this property was planted to grapes, citrus and avocados, but it was later converted to range land for raising cattle. This and other Hengst family property is what we are concerned about in the proposed Edison alternative #2 and #6 Cross Valley Loop.

In looking at the proposed route, the devil himself could not have chosen a more destructive route to the Hengst property.

First the right of way starts on the east boundary of the Sentinel Butte property and continues west for approximately 3/4 of a mile, then it moves north over 3/4 of a mile, then west for 1/8 of a mile.

The next Hengst family property the right of way crosses starts west of Rd. 204, crosses over 1/4 mile of plums, taking out a 15 HP pump and well as well as 1/4 mile of 8" mainline pipe used to irrigate the plums and other crops. The lines then cross Millwood Drive and Cottonwood Creek and continue on Hengst property crossing a wagon wheel well, a 100HP pump, and 1/4 mile of 10 inch pipeline. The lateral or wagon well irrigates 230 acres of plums, oranges and pomegranates. It is the loss of this well that will effectively put Hengst Farms out of business.

Let me explain how a wagon wheel well is dug. First, a 36" well is drilled about 100 ft. down to decomposed granite. It is cased with concrete pipe and then while a pump is pumping the water, a man is lowered into the well and jackhammers an 8 foot room from which he proceeds to drill many horizontal holes with an air or hydraulic powered drill several hundred feet, thus increasing the yield of the well. This type of well can no longer be constructed at any price because of OSHA restrictions.

It is because my father had this well constructed in 1959 that we are now able to irrigate the 230 acres previously mentioned. Without this well most of the acreage would revert to dry land farming with a loss of income in the millions over the next thirty years or more.

The proposed lines proceed west and then north along Road 194, making a turn near our 40 acres of oranges with pulling access needed. Facilitating this turn will require the removal of many orange trees. Access roads will need to be built as well on some of our property. Sacrificing three major pieces of Hengst property is asking a lot of our family to contribute to this project. We are only a portion of the people affected by either the Proposed Route #1 or Alternate Route #2 and #6. I know there many people with similar concerns.

I30-1

I30-2

That is why Alternate Route #3A is so desirable. With a small jog around the Stone Corral Vernal Pools, it would be the most environmentally friendly of any one of the proposed routes in addition to protecting many farming operations and businesses. Thank you for listening.

I30-3

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush St. Suite 1700
San Francisco, CA. 94104-4207

July 23, 2009

Hello, my name is David Hengst.

I'm here tonight representing my family and community's concerns. Farming at the best of times is a fragile house of cards. Take out any one component, be it favorable weather, good production, commodity price, working capital, farmable acreage, adequate water, etc., and the whole house will come tumbling down. I am a 5th generation farmer in Elderwood; my family and I have battled to keep this house of cards, which is Hengst Farms, profitable for over 100 years. We have experienced many trials and losses and have had to adapt our farming many times, attempting to stay profitable. Luckily each frugal generation has been able to leave a little more farm land for the next; land that increases in value and is really the only offset to the highs and mostly lows of farming.

Farmers are aware of all the things that can go wrong during each crop year and take them in stride, always hoping for a better 'next year.' What we cannot digest are outside negative affects that are 100% man-made and have nothing to do with the weather, markets, pests, labor, or the cost of tea in China. Alternative Routes 2 and 6 will not just have a negative effect upon Hengst Farms, they will produce a devastating Class Five tornado affect upon Hengst Farms' house of cards.

I31-1

My father Bob Hengst has already spoken about the Route 2 caused loss of our wells; one, a wagon-wheel well which irrigates 230 acres of plums, oranges, and pomegranates cannot be duplicated, so let me now speak to some of the negative monetary affects to Hengst Farms. Over the next 50 years the loss of those 230 acres at an average net return of \$2000 per acre is 23 million dollars. The flat land on the Sentinel Butte property is so cut up by Routes 2 and 6 that no other use other than cattle grazing is possible. We have always tried to keep the country, 'country' and avoided selling property for houses. However, the loss of potential home sites and the freedom future generations would have in selling them will cause a loss of 27 million dollars or more. Together, we're looking at about 50 million dollars loss to my generation and the next. We can legitimately count the cost to the next generation because my family has been farming and ranching in Elderwood since the early 1900's and we are raising our kids to continue this tradition into the future. Has Edison considered the deeper costs? Has the CPUC? Maybe Route 3 isn't the most expensive route.

Has anybody researched the danger to farm workers under the lines? Carrying ladders, operating forklifts, boom trucks working on pumps, etc. do not seem like safe things to do. My uncle had to always keep the bob-wire grounded when he was building fence under the existing Visalia Rector lines to avoid getting a very powerful shock. Will insurance companies continue to offer affordable liability insurance? Will banks offer lines of credit to farms with an obvious high risk? How can the CPUC authorize Routes 1, 2, or 6 through farm land when Edison itself has stated that permission must be granted to even park under the lines?

I31-2

And what about the cost to our community? In the old west when the bad guys robbed the bank they were stealing from the whole town. Has anybody added up the Edison Robbery ripple effect. Every acre either temporarily or permanently lost to farming means that much less work available in the community, that much less money spent in the community, that much less tax dollars paid in the community, and that many more people who either become a burden on the community or get fed up and leave California altogether.

I31-3

Tulare County is already facing some of the highest unemployment in the country; do we really need to force it higher? We only need to look to the West Side of the Valley to see the truth of how much devastation to a community can be caused by one poor decision. I appreciate the CPUC allowing this meeting for additional input on the Alternative Cross Valley Routes before they make their decision. I pray that they will not make a decision to go with Routes 2, 6, or 1, which will be nearly as devastating to our communities as the Delta Smelt ruling was to the West Side. I am confident wisdom will prevail and they will instead choose Route 3A which avoids farmland, homes, and the Vernal Pools; Vernal Pools, by-the-way, that will need to be 'gotten around' when future new lines are needed in the north.

Thank you for your thoughtful consideration,

David Hengst
Elderwood lover

David Hengst
37650 Millwood Dr.
Woodlake, Ca. 93286

My name is Foster S Hengst. I am 14 years old and live in the community of Elderwood with my parents and sister. My dad and grand parents are here to speak today about how routes #2 and 6 will affect our family. I am here to speak about how it will affect me and my friends who go to Foothill Bible Church. I want to thank you for this opportunity to tell you our story. At Foothill Bible we have a group of young men that are part of Christian Service Brigade. Brigade teaches leadership with responsibility and how God's truth applies to everyday life. We participate in many outdoor activities like Skeet shooting; Rock climbing, Archery, Nature walks and picnics. We enjoy all these events on property in the Sentinel Butte Valley that has been in my family for six generations. This valley is underneath both of Alternate routes #2 and 6. Notice I said underneath, the pole line and high voltage wires will run right through the center of our beautiful valley. If one of these routes is selected we will no longer be able to use this land for any of these activities. Christian Service Brigade will lose a valuable and truly unique place to learn and grow in leadership. I will lose land that my family has kept and preserved for me & my children please do not put the poles through the valley of the sun. Choose a route that doesn't come through Sentinel Butte valley

I32-1

Sincerely

Foster S. Hengst

Foster S Hengst

Foster S. Hengst
37650 Millwood Dr.
Woodlake, CA 93286

SAN JOAQUIN CROSS VALLEY LOOP PROJECT PERSPECTIVE

FROM LINDA HENGST

37900 MILLWOOD DR.

WOODLAKE, CA 93286

(559) 564-8533

July 23, 2009

My name is Linda Hengst and I grew up west of Farmersville under the power lines just north of the Visalia Rector Sub-station. Our daughter and her husband bought my childhood home from my mom, allowing her to stay in her home as long as she wanted to do so.

Bob and I have been married 45 years. I fell in love with the area after I fell in love with him. Never in my wildest dreams would I ever have thought that our beautiful Elderwood property would be threatened by the same Edison lines from my childhood, especially since we are in P.G. and E. territory.

The thought of Edison lines coming thru one of the most pristine areas of our ranch known as Sentinel Butte is hard to stomach. This area has long been a source of pleasure for our family. Many church picnics have taken place there as well as family gatherings at Easter time to celebrate our two sons' birthdays. Native Ameicans from the past must have loved it as well, evidenced by their deep mortar grinding stones, petroglyph drawings on rocks, and the burial ground which was confirmed by a dig from the College of Sequoias. A huge pageant called "The Valley of the Sun" also took place as thousands sat on the hillsides and viewed it back in the 1920s. Bob's mom and dad were a part of that unprecedented production. I can only imagine their sadness and anger over such a proposal if they were alive today.

I33-1

We are one of many family farms that would lose valuable farm land. It is also land that would make beautiful home sites. Our daughter's family, who currently live in my childhood -home, just north of the Visalia Rector Sub-Station, would love to move back to the farm and build a home. They too never dreamed they might have to still look at power lines as well as hear their buzz as they drive under them each day. They have tried to sell their thirty acres, only to be told it could only be sold as fifteen because there is no value to the acreage under the power lines.

My family once experienced the loss of a horse when one of these lines broke. Not long ago, I was baby-sitting when I heard a huge bang followed by the electricity going out. These lines scare me and I think that it would be pro-active to replace as many lines as possible making it safer for all living nearby, as they would be doing as part of proposed Route #3.

My father planted walnuts from the nut itself and he was so proud of his orchards. I remember when Edison made him take the trees down that were under the lines. I don't think he ever got over the hurt of losing something he had worked so hard to produce.

Farming hasn't been easy for us in the past years and we too have worked hard to produce our crops. I don't want to see my family go through this again. By choosing the more northern Route Three, using the existing lines and going over foothill cattle country, much valuable farm land can be preserved. Thank you for listening.

I33-2

Tammi Hitchcock
1811 E. Seeger Ct.
Visalia, CA 93292

Phone: 559 636-8424
Email: jamic2tammi@sbcglobal.net

July 21, 2009

Mr. Jensen Uchida
Public Advisor's Office
CPUC Public Advisor
505 Van Ness Avenue, Room 2103,
San Francisco, CA 94102

Docket # A08-05-039 ~ San Joaquin Cross Valley Loop Transmission Project

Dear Public Advisor:

I am writing to ask for you to support alternate Route 3 for the new proposed San Joaquin cross valley loop. This alternate route would be less invasive causing less farmland to be disrupted. There is a big worry about the water table. The drilling for the anchors of the support towers would cause the water table to drop. Farmer's are already scrambling for what water they have. This would surely be detrimental to anyone with any farmland along this corridor. I ask that you give Route 3 more consideration.

I34-1

Thank you for your time and consideration of Route 3.

Sincerely,



Tammi Hitchcock

Tom & Jennifer Logan
P. O. Box 44140
Lemon Cove, CA 93244

July 23, 2009

Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Attention: Mr. Jensen Uchida - San Joaquin Cross Valley Loop Project

Re: Protest to SCE San Joaquin Cross Valley Loop Transmission Project
Docket # A08-05-039

Dear Mr. Uchida:

We wish to protest Southern California Edison's application for Route 1 in Tulare County in which we are residents. Route 3, the Stokes Mountain Intertie is the most reasonable route.

We object to Route 1 for some of the following reasons:

1. Approximately 300 property owners would be affected and several homes may have to be demolished.
2. This route goes through prime agricultural land, the vast majority of which are permanent tree crops; this will impact approximately 5,000 plus agricultural acres. This is the only area in the world that grows premium citrus.
3. Property values will decrease by 10% to 20%.
4. Schools and some city owned properties and proposed commercial development on city property will be affected. Some property will not be useable due to the placement of the high tension lines.

I35-1

- 5. Highway 198 is a scenic corridor route to the Sequoias and these towers and lines will not blend in with these natural wonders, how will this affect tourism? What about loss of tourist dollars to affected cities?
- 6. Seven cities and areas will be directly affected by this ill-advised route.
- 7. The environmental impact will be tremendous, clear cutting under the power lines and the lines themselves will affect wild-life in our area, such as several types of snakes, hawks, owls and numerous other species of birds. Coyotes, kit foxes, raccoons, skunks, possums, bats and various species of lizards are among other animals that will be displaced. These animals plus all the native flora that will be eliminated are currently on our and our neighbor's property.
- 8. There are also safety issues to be considered as follows:
 - a. Mist from spraying operations could reach the high voltage lines resulting in death or serious injury to the operator.
 - b. We have a part-time employee who has a pacemaker and has been told that he may be at risk working under and around these lines.
 - c. There are some reports that indicate that living or working near these high voltage lines can cause some types of cancer.
 - d. The right-of-ways under and around the towers will be an open invitation for trespassers using motorcycles, dirt bikes and all terrain vehicles. Some of these irresponsible riders have accidents and then blame the property owners for their injuries. Will Edison defend and indemnify for possible legal costs?
- 9. Some of these power lines seem to have a natural attraction for certain insects which then migrate on to our fruit trees. Dust from



- bare ground under the lines will attract more mites which love dusty conditions and are costly to control.
- 10. Loss of farm property is going to mean loss of income and a reduction in the work force for some growers. Jobs are hard to find here as it is. This will create a trickle- down effect on the economy of the county.
- 11. Southern California Edison already has power lines and the right-of-ways on Rector Line north to the Stokes Mountain Intertie - Route 3. There are approximately eight property owners who would be impacted on their ranch lands, some of these are already willing to have the lines go through their land.
- 12. The majority of this line appears to go through Williamson Act land, how can you take this land out of the Williamson Act?
- 13. Edison needs to replace towers and wire in older systems. Why do they not do it now in existing right of ways such as Route 3? Also, apparently there is now a new type of transmission line that is capable of carrying 50% more power, why not put that in existing line areas?
- 14. Graffiti is a constant problem in the rural areas - will Edison be responsible for keeping it off the towers and poles?
- 15. It seems that Edison wants Route 1 in order to help power in the Visalia, Tulare and Hanford areas, if this is so why not build a power plant in this three city triangle?
- 16. At one meeting a man from Edison stated that one blunt-nosed lizard has more consideration than 100 people.
- 17. Will Edison ever fully disclose all of their information on the proposed routes? I very much doubt it.



18. Wells near the power lines will no longer be able to be serviced per well service companies due to worker safety. Why has the location of wells not been addressed in either Routes 1 or 2? I35-9
19. If vernal pools are a problem in Route 3 then the lines can be moved just a bit either to the right or left to avoid the pools. *Fish & Game has said it is possible with no impact* I35-10
 There is a lot of controversy over Routes 1 and 2 by the citizens of this area. Request is made that the CPUC hold a public hearing in our local area and that this meeting be open to public input.

Respectfully submitted,

By: Thomas Logan

Thomas Logan

By: Jennifer A. Logan I40-4
Jennifer A. Logan I40-4

P. O. Box 44140
Lemon Cove, CA 93244
(559) 592-6613

July 23, 2007 Comment Letter I36

Mr. Jensen Uchida
San Joaquin Cross Valley Loop
46 Environment Sciences Associates
335 Bush Street, Suite 1700
San Francisco, CA 94104

Dear Mr. Uchida,

Our family and neighbors are very concerned about the feasibility of losing what water we do have, and that's very little, if the transmission lines with their 60 ft anchor poles cause an alteration of the underground water flow to our wells. I36-1

We live in antelope valley, just 100's of feet from routes 2 and 6. It would be greatly appreciated if an alternate route could be considered.

Sincerely,
Lary & Sandy Maloy
21638 Ave 360
Woodlake, CA 93286

July 23, 2009

Visalia Convention Center
Hearing on the Draft EIR
Cross Valley Loop

I'm George McEwen, I reside at 22114 Boston Ave, Exeter, CA

I have 4 concerns with the Draft EIR:

1) 4.1-1a Highway 198 is the scenic corridor to the Sequoia National Parks. In 1925 the entrance to Exeter had an archway with a sign stating "Gateway to the Sequoia National Parks". We all know this beautiful view as we travel eastward towards Exeter. The EIR Mitigation Measure 4.1-1a states the visual impact is less than significant or Class 3. It shows a picture (Figure 4.1-7b) of a simulated view of the 160 foot towers. You can barely see these towers in the simulated picture. In real life you will be able to see them, and that will be significant. I believe this simulation is wrong and should be corrected to what it will actually look like.

I37-1

I would also like to state at this time there is another simulated picture (Figure 4.1-11b) which was taken down the street from where I live. This picture shows a 35' power pole next to a simulated 160' tower. The simulated picture makes the 160' tall tower look 60' tall. This picture also needs to be corrected or omitted. By the way, these simulations were done by SCE.

2) 4.2-1a My second concern is soil compaction during construction. On the proposed route, we will have two towers on our property. The heavy equipment used to set these towers will undoubtedly cause severe soil compaction. This compaction will definitely affect any orchard or farm land. I don't need to know the broad mitigation measures in 4.2-1a. I need to know in detail how SCE is going to rectify this problem.

I37-2

3) 4.2-5 The Draft EIR states the impact on the existing irrigation and other ancillary systems required for farming as less than significant or Class 3. Removal of wells to do this project may be very significant if the farmer cannot duplicate his existing well. Drilling a new well doesn't mean you will get the same productive well. That is to say, will the water table be at the same level, will the draw down be the same, or the gallons per minute be the same? This is easier said than done. And in certain growing areas, this may not be possible. Again, I believe growers who will be affected by this, need to know in detail how this will be rectified. In some cases this might be a Class 1, significant unmitigable. Route 3 will not have this water well issue, because the power lines were there before wells were drilled.

I37-3

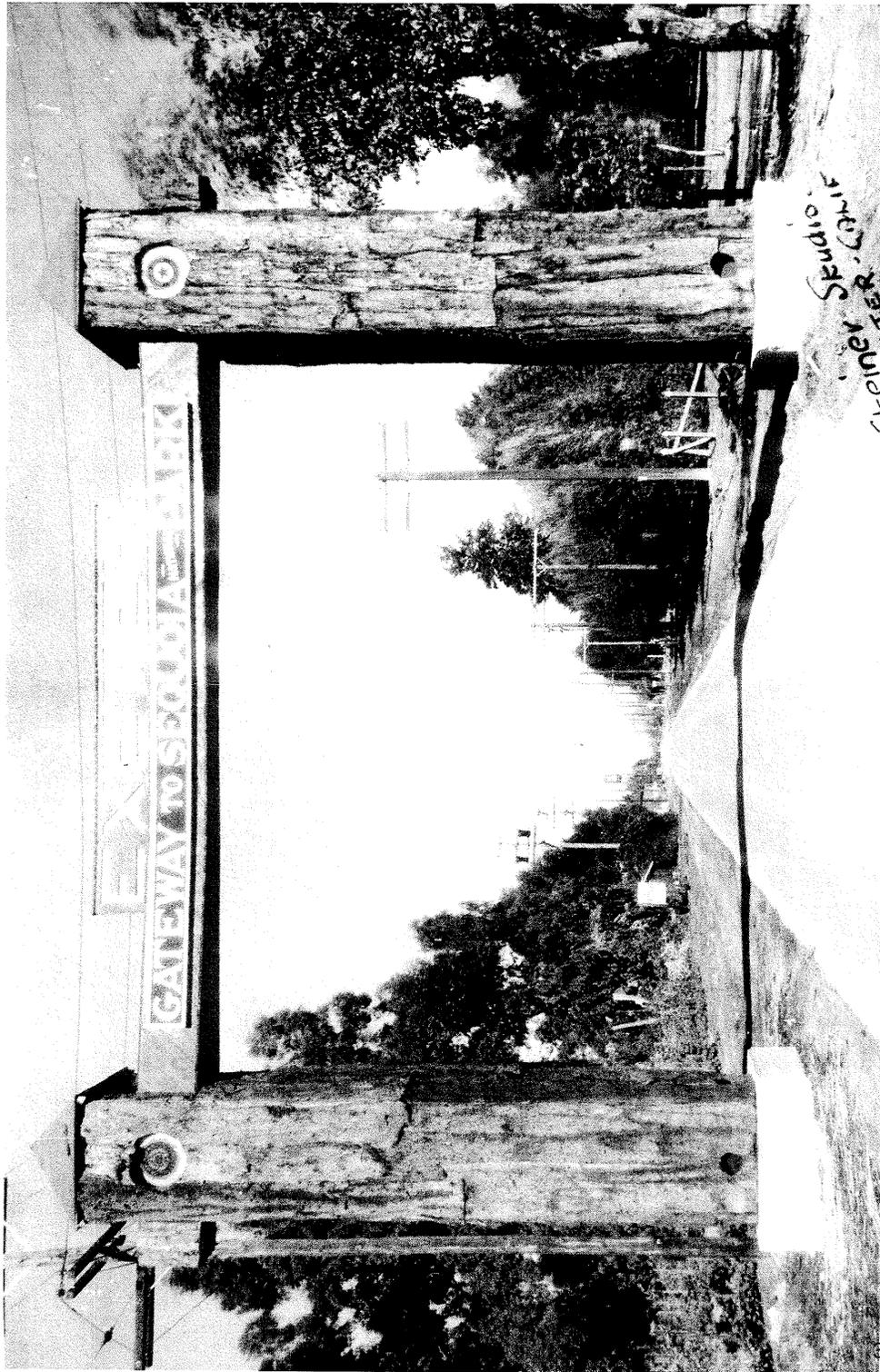
4) 5.3 Alternate Route 3, according to this report, has the least impact to agricultural land. And it would be the environmentally superior route except for the vernal pools in the Stone Corral Ecological Reserve. 5.3 states that this has significant unmitigable impact to the preserve. The EIR states that there is no way to go around it. Our P.A.C.E lines transmission consultant has developed a very good route around the preserve that does not effect housing and production agriculture. Part of this route uses an abandoned railroad right of way. Our consultant and 3 other members of P.A.C.E met with two representatives of the Department of Fish and Game. The opinion of the Department of Fish and Game was that it is feasible to reroute Alternative 3 around the preserve. Using this reroute will then make Alternative Route 3 the environmentally superior route.

I37-4

I'm sure there will be other concerns addressing the Draft EIR. The reality is that the project is needed and will get approved. The EIR is on the right track. It may not have addressed some issues completely. But it is trying to avoid impacts to our agriculture, our communities and to our environment. Using the existing right of way, that is, using the existing resource, and avoiding the vernal pools by going around them, is the best solution for this project. These lines have been here for almost 100 years. Yes, we have encroached upon them. But they were here first. And since they are almost 100 years old, they will be upgraded sooner or later with new singular poles and taller poles. The vernal pools will still be there. So, if you don't go around them now, you will have to go around them when the line is upgraded. In my opinion, it will be a lot less expensive if the upgrade is done now than 10 or 15 years from now.

Thank you for your time and consideration for my concerns with the Draft EIR.


George McEwen
22114 Boston Ave
Exeter, CA 93221
george@mcewen.com
559-804-4040 mobile/w voice mail



This is a photograph of the Exeter Gateway to Sequoia National Park, located on what is now Highway 65, south of Exeter. It was a magnificent arch with a veneer of redwood bark. The arch crossed above the Orange belt Highway as it entered Exeter from the south. The Exeter American Legion sponsored the placing of the arch to entice visitors into the city on their way to the parks. Built in 1925, after World War I, the arch was built on a concrete base.

July 23, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

From:
John E. Pehrson
1571 N. Filbert Rd.
Exeter, CA 93221

RE: Comments on DEIR for So Cal Edison San Joaquin Cross Valley
Loop Transmission Project (CPUC A.08-05-039)

The Draft Environmental Impact Report for the above project re-
quires revision before preparation as a final report for use in
decision making. Following are reasons for revision.

Based on the DEIR analysis of route alternatives and selection of
a superior alternative the Commission is required to choose be-
tween the importance of prime agricultural land loss versus saving
a biological resource (vernal pools).

The DEIR treats these land losses as having less significance than
impacts on the pools in ranking of the alternatives. Agriculture
is more than an interim user of the land. A revised draft merits
contacts with the Dept. of Conservation for information of benefit
to the Commission. The Project's route selection requires addition-
al knowledge in a revised report.

Respectfully submitted, John E. Pehrson

John E. Pehrson
(559) 972-2089

I38-1

PELTZER GROVES, INC.

34286 Road 188, Woodlake CA 93286

July 20, 2009

Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida,

My name is Barbara Peltzer and I farm approximately one thousand acres of citrus. My family is now in its 5th generation of farming the same land, and I fear that some of it will quite possibly be dramatically affected should route 2 or route 6 be allowed. It's quite possible these routes will force my family farm to re-locate water wells, wind machines and water transfer lines running perpendicular to the easement right of way. We've lost over 5 wells in the past few years due to a very low water table in our area. Should we be required to re-locate any of our other wells, I fear that water will be difficult to find, you see all of the best sites are now in place, to move to other sites could prove detrimental to my family. Please seriously consider route 3 as the final choice as it minimizes the negative effect in highly intensive agriculture production acres, resulting in less impact to ag landowners.

As for the re-location of wind machines, they are all specifically site located so as to protect 10 acres of citrus. To move these even a few feet in any direction would prove detrimental and result in crop loss as a result of even a marginal frost year. Thank you for your consideration.

Sincerely,

Barbara Peltzer

Barbara Peltzer
President
Peltzer Groves, Inc.

I39-1

LRP Orange Co.
P O Box 48, Ivanhoe CA 93235

July 20, 2009

Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Mr. Uchida,

My name is Larry Peltzer, I'm a Citrus Grower and current Vice President of the Tulare County Farm Bureau. There are areas of concern which we would like to address with you and I have listed them as follows:

The EIR does not adequately identify, address or define mitigation measures to offset impacts to farmland. The agricultural mitigation measures referenced throughout the EIR are deficient and incomplete. In addition the EIR does not take in to consideration cultural practices for ag and impacts/disruption to activities such as pest abatement, dust control management, aerial applications, and other activities which may be restricted to a great degree under and around the transmission lines. I40-1

The EIR does not speak to the impacts associated during construction phase, and how agricultural lands in the path of construction will be impacted. We know that in today's climate, Greenhouse Gas Emissions must be part of all environmental studies and reports. The EIR does not adequately account for the impact of construction and the GHG emissions that will result from construction, or the removal of trees that scrub the air of CO2. I40-2 I40-3

Irrigation of agricultural lands will be significantly impacted on certain properties, and the feasibility of being able to replace and relocate the wells would be extremely costly and in some cases not possible. This is an unavoidable, significant, and immitigable impact not appropriately addressed in the EIR. I40-4

Quality of life impacts: rural families and farm properties impacted by the route will likely experience a quality of life impact. Not only aesthetics, but also loss of productivity on farm lands which will reduce profitability and may eliminate jobs in the community if acreage has to be removed from production. I40-5

The Route 3 alternative has not been thoroughly explored and assessed for feasibility. It stops short with a statement made on page 5-7 which indicates that due to the sensitive nature of habitat in the Stone Corral Ecological Reserve that a bypass was not feasible. There is significant evidence being introduced by PACE (at the July 23 hearing) that a "work around" the ecological reserve is possible and feasible. I40-6

Furthermore, the Route 3 choice would be particularly advantageous for also reducing exposure to Electric and Magnetic Fields (EMF). Even though health and safety risks to humans associated with EMF are unclear, and the EIR does not specifically address them as a health/safety risk to humans, the information we have about EMF is inconclusive and therefore should not be dismissed entirely. I40-7

Logically, the existing Rector Line will have to be upgraded sometime in the future, and since it currently cuts right through the Stone Corral Ecological Reserve, the question we should be asking is why not address a feasible alternative NOW and develop a proactive solution to adopting Route 3 and upgrading the Rector Line in the future with the same sound environmental stewardship plan with a defensible EIR now versus waiting until later to address the ecological reserve. I40-8

Route 3 (as stated on 3-15 of the EIR) meets both basic project objectives, and meets all legal, regulatory, and technical feasibility criteria. Route 3 would result in the permanent removal of fewer acres of farmland than the Proposed Project (Route 1) and impacts would be generally similar on Cultural Resources as to the Proposed Route (Route 1). The only major issue on page 3-16 regarding why Route 3 was not provided more consideration is because of the vernal pools, and PACE has a workaround alternative to address this. I40-9

In 1988 the California legislature approved Senate Bill 2431 (Chapter 1457, Statues of 1988) and this law known as the Garamendi Principles identified the following values. These values should be incorporated into the CPUC's final decision and you may want to references (items 1-2) in the EIR comments too. I40-9

In recognition of the value of state's transmission system and the need for effective long-term transmission corridor planning, in SB 2341 the Legislature declared that it is in the best interests of the state to conduct transmission sighting according to the following principles:

1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities were technically and economically justifiable.
2. When construction of new transmission lines is required, encourage expansion of existing right-of-way, when technically and economically feasible.
3. Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons as determined by the appropriate licensing agency.

I40-9
cont.

We ask that you take these areas of concern and seriously consider them before making any dramatic decision that will seriously affect the livelihood of family farming in this region.

Sincerely,



Larry R. Peltzer
Owner

PELTZER FAMILY FARM MGMT.

16865 Avenue 315, Visalia CA 93292

July 20, 2009

Jensen Uchida
San Joaquin Cross Valley Loop
Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Mr. Uchida,

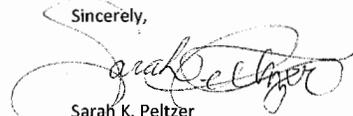
My name is Sarah Peltzer; I am 15 years old and an 11th grade student at Exeter Union High School, where I am an active member of the Ag Leadership, and ASB Leadership classes. I am the oldest of six siblings that are of a fifth generation in farming.

I have a great concern that the routes you have chosen in your project will have a devastating impact on the production and growth of my families' future. My brothers and sisters and I have relied on the fact that the years of production built up with each generation would sustain us and any future generations that follow.

Our research has proven that the best alternative for your project is to use Route 3. Although there are many legal issues and concerns that I've yet to understand, what most concerns me is the impact that the other routes would have on permanent crops, wells, wind machine structures, and our agricultural community in general.

I ask respectfully that you please consider the future generations that will follow their families in farming when making your final decision.

Sincerely,



Sarah K. Peltzer
5th Generation
Farm Management

I41-1

Karen Redfield
21451 Ave. 360
Woodlake, CA

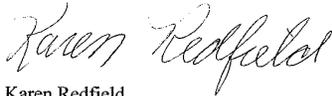
Dear Mr. Uchida:

I live on Ave. 360 and my husband and I farm 40 acres of olives on land adjacent to Route 2 and Route 6 in the Antelope Valley. I am very concerned about the effect this project would have on the underground water supply. We have drilled so many times we could have a golf course out here from all the holes!! Water is very difficult to find. Our water runs in underground stratas so you have to 'hit' just right to be successful. I am very worried about what might happen if you go 'upstream' from us and drill down for your poles. We have no idea exactly the direction our underground river flows so anything north of us is a threat, and that is exactly where routes 2 and 6 are—north of us. The same story is true, obviously, for anyone living out in this area. We are just fortunate that we have more land on which to drill. It's hard enough worrying about the drought and its effects—we don't want to have to think about what the deep poles might do to our stratas underground!

I42-1

A very appealing option still remains by developing Route 3 with a minor deviation around the vernal pools. It affects very few land owners, makes better use of the existing right of ways, and has almost no adverse effects on agriculture or residential use. Please consider this when making your final decision.

Sincerely,



Karen Redfield

Randy Redfield
21451 Ave. 360
Woodlake, CA 93286

July 23, 2009

Mr. Jensen Uchida
CPUC Project Manager
505 Van Ness Avenue
Energy Division, Room 4A
San Francisco, CA 94102

Dear Mr. Uchida:

I am a resident and farmer of 40 acres of olives on land adjacent to Routes 2 and 6 in the Antelope Valley. After examining the Environmental Impact Report for the San Joaquin Cross Valley Loop project routes, I discovered three biological and cultural factors not addressed which have a direct and profound impact on my family, the residents of the Woodlake / Elderwood area, and the citizens of California.

To begin, property owners and residents along Routes 2 and 6 are very concerned about the effect this project will have on the underground water supply. Nowhere in the Environmental Impact Report did I find mention of this alarming concern! Historically, finding water in the Antelope and Elderwood valleys has been difficult at best. One cannot just drill a new well or deepen an old one to get more water. In these valleys the only underground water available comes from narrow fractures and stratas which are extremely difficult to find. One does not have the luxury of simply lowering a well deep enough to reach the water level as is the case in much of the Central Valley. In our situation, it is a matter of hope and prayer that the well drilled just happens to drop into a small underground stream or aquifer. It is expensive and often futile. I speak with first-hand experience. In the 32 years I have resided here, I have drilled for water over 24 times on my 40 acres with very few successes and at a cost I do not even want to try and remember! At least I have 40 acres of land on which to conduct my water exploration. Many of the small farmers and residents in this area do not. They may have no options for new places to drill.

I43-1

Indeed it is a blessing to locate such an underground strata, and it is not something one wants to tamper with. Many locals have heard the sad stories of how deepening an existing well resulted in the landowner destroying his water source. Once a hole is poked through a crevice containing an underground stream, the underground water often finds a new crack or crevice in which to flow. It is easy to understand how the drilling of the deep holes needed for foundations for the placement of Edison's towers and poles for this power project may have a serious and irreversible effect on the water on which some of the farmers and residents in this area depend. Orchards may be left withering in the sun and homes without water to flush a toilet or fill a sink! And how will property owners be compensated for that?

Next, I am concerned that Routes 2 and 6 will threaten a very unique early pioneer historical sight. This, also, was not mentioned in the Environmental Impact Report. In 1926, the historic Sentinel Butte Ranch was the sight for the "Valley of the Sun" pageant, the largest pageant ever held in California at that time. When the population of Woodlake was only about 1,000 and Visalia's was only around 7,500, Woodlake boasted upwards of 10,000 guests! People came from far and near. The pageant portrayed the history of the San Joaquin Valley from a mythical time, before the Indians came, down to the time of its presentation, May 1, 1926. Newspapers near and far announced every aspect of this event from the early planning stages through its completion. There is no question about it... this was an historic event of grand proportion! Both Fox News and Pathe News filmed the event. According to the Feb. 6, 1926, article in the Woodlake Echo, "*Nothing is being overlooked...*" and Fox News and Pathe News are "*...clicking the various scenes of the big '49 doings with two cameras.*"

I43-2

Motion pictures started the newsreel with the '49er event that Three Rivers sponsored. This was an authentic wagon train trail drive to Woodlake to help with fundraising for the pageant. Later the pageant itself took place and what a history-making affair it was! The motion pictures were later shown to millions of movie goers in theaters all over our nation! This film included Native Americans living in the area along with the early pioneers (including the first white man born in Tulare County). The setting for this pageant was located about two miles north of Woodlake in a picture-perfect valley that provided its own natural amphitheater. The proposed Routes 2 and 6 will go **directly** through the idyllic valley that hosted this sacred event in the history of the people of this part of the Central Valley.

Finally, the EIR report fails to make mention that Routes 2 and 6 threaten the destruction of sites important to the local history of the Native Americans. In fact, if Routes 2 or 6 are developed for this project, power lines and towers will be built over, on, or within just a few hundred feet of local Native American villages and burial sites. Evidence of the communities of our first Americans abounds and includes

- The sacred land the local Yokuts believed to be the creation site for all life
- Holy pictographs and paintings
- Large rocks used as stones for grinding acorns to make bread
- Artifacts of jewelry, weapons, and day-to-day possessions
- Sacred Indian burial grounds

A May 12, 1961, COS archaeological survey provides a verifiable record of Native American life in the Sentinel Butte area along these routes. The record includes bountiful scientific evidence of local early American tribes; evidence of life and death! This site is directly along the path of the power lines as they would traverse the west side of Antelope Valley (the very same area referred to as the location of the "Valley of the Sun." pageant above).

I43-3

The reports lists the findings of

- Petroglyphs and pictographs
- Indian grinding stones
- Obsidian pieces
- Pestle pieces
- Steatite pendant

- Charm stone
- Clam and abalone shell pieces
- Pottery pieces
- Human burial
- Etc.

I43-3 cont.

Truly, the Environmental Impact Report is not complete. The potential loss of ground water threatens the destruction of agriculture, individual's livelihoods, a local population's economy, and its identity. This impact on the environment will be devastating to those affected. In addition, the Environmental Impact Report pays no regard to the destruction of the historical sites of the early pioneers and the Native Americans. The impact on these sites would be overwhelming and would forever rob our prodigy of a view of their past. We cannot let this happen!

A very appealing option still remains by developing Route 3 with a minor deviation around the identified vernal pools. With the issue of the vernal pools mitigated, this route is clearly the best choice. It affects very few land owners, makes better use of the existing right of ways, and has almost no adverse effects on agriculture or residential use. Please consider these points in your final decision. Our children's children will one day thank you for making the most thoughtful and important local decision of our time.

I43-4

Sincerely,

Randy Redfield

Comment Letter I44
Del Strange
464 E. Jackson Ave.
Tulare, CA 93274
(559) 686-1556
July 23, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

RE: Comments on the Southern California Edison's San Joaquin Cross Valley Loop 220KV Transmission Line Project and the Draft Environmental Impact Report (DEIR) [CPUC A.08-05-039 and SCH #: 2008081090].

Dear Mr. Uchida:

Thank you for the opportunity to comment on this Project. It is understood and agreed upon that a Cross Valley Loop Transmission Line is necessary to increase transmission capacity in the region, while continuing to provide safe and reliable electric service; and that any impacts of the Project be minimized, both on the environment and on human lives. Consequently, we must all strive to identify the Project alternative, including the Proposed Project, that best meets these criteria.

Although the DEIR identifies Alternative 2 as the Environmentally Superior Alternative, in reality under CEQA the true Environmentally Superior Alternative is Alternative 3, based on the following facts:

1. It meets all of the Project objectives identified by SCE and is feasible;
2. It meets project need with the least environmental impact of all available options. [It can be slightly modified to avoid or mitigate any impact to northern claypan vernal pool habitat, or to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands.];
3. It is the option with the least impact on human lives, wildlife, and plant life, including:
 - A. Loss of high-value, productive agricultural land. [Permanent loss of 16.7 acres of Farmland versus 31.1 acres for the Proposed Project, 30.7 acres for Alternative 6, and 23.9 acres for Alternative 2.];
 - B. Loss of Prime Farmland. [Permanent loss of 6.6 acres of Prime Farmland versus 16.1 acres for the Proposed Project, 9.5 acres for Alternative 2, and 6.7 acres for Alternative 6.];
 - C. Scenic views and scenic highways;
 - D. Avoidance of major impacts on the City of Farmersville, its people, and the Farmersville General Plan;
 - E. Displacement of existing housing;
 - F. Displacement of people;
 - G. Demographics -- Future population and housing;
 - H. Construction or expansion of recreational facilities;
 - I. Affects fewer citrus and walnut orchards;
 - J. Irrigation and domestic well abandonment and relocation;
 - K. Infringement upon a major floodplain;
 - L. Electric shock from induced currents;
 - M. Noise impacts from operation of transmission lines and corona discharge effects, or humm;

Mr. Uchida/SJCVLTP
Comments on Project & DEIR

Comment Letter I44
July 23, 2009
Page 2

- N. EMF impacts;
- O. Use of existing SCE ROW. [Uses 14.6 miles of existing SCE ROW versus only 10.8 miles for Alternative 2, 8.1 miles for Alternative 6, and 1.1 miles for the Proposed Project.]; and
- P. Overall cumulative impacts.

Consequently, for all of these reasons, Alternative 3 is the Environmentally Superior Alternative under CEQA, hands down, and should be declared the "Project of Choice" by the CPUC. Of course, the slight realignment modification to avoid the vernal pool habitat would be necessary.

I respectfully urge the CPUC to take action to select Alternative 3 so that SCE can stay on schedule with the Project and continue to provide safe and reliable electric service to the region.

Thank you for the opportunity to comment.

Respectfully yours,



I44-1
cont.

I44-1

July 23, 2009

Mr. Jensen Uchida

San Joaquin cross valley loop transmission project

c/o Environmental science associates

225 Bush Street, Suite 1700

San Francisco, Ca 94107-4207

Mr. Uchida;

My husband & I are not politicians, or big company CEO's; we are real people in a real simple part of the world, no triple lane freeway, no high risers, not even a street light along our driveways. We are not country bumpkins, or back woods creatures. We just enjoy our community as it is. And hold a concern that the future for our children, & grandchildren in our part of the world is in jeopardy.

My husband & I, and our two children moved to the beautiful view & peaceful atmosphere that is our "dream home" over twenty years ago. It was; and still is a place that is comfortable, quiet, and safe. We raised our children here and now both of our children & their families now own acreage & reside in this very area. It's a small; rolling hills, some citrus groves & beef cattle, grazing in the pastures. Most of us have jobs in the neighboring towns. Our commute is approximately 30 minuets one way, and we love it! When the work day is done we can't wait to slip back into our comfy homes. In any direction there are relaxing & majestic views. Ours, along with both of our children's properties will be affected by the addition of the San Joaquin cross valley loop transmission line.

Power for the Elderwood community is supplied by pacific gas & electric. I do not understand why we are even having to deal with this issue considering that fact. It is my understanding that we will not; nor will we ever benefit by this project at all. In fact, the addition of these lines will only drop our property values **considerably**, as well as pose possible dangers, and future health issues; not to mention "ruin" our local majestic views. We live in the country because we chose to do so, away from the hussle & bussle of the city life.

I have been unable to get a connection with the internet address that was provided, due to "technical problems"; or so that is the message I receive.

I45-1

In our opinion **route 3** is the best alternative. As we understand , it uses more of existing right of way, and this meets the Garamendi principles in sb2431. There is "less" damage to intensive agriculture-permanent crops, wells, drive rows, etc.. **Route 3** also has the very old rector line & is low, noisy & dangerous. The new line greatly reduces EMF emissions. As for the Stone Corral Ecological Preserve location, the line can easily be circumvented by moving it just slightly. **Routes 1, 2 & 6** seem to have more negative environmental impacts to agriculture, communities and people.

I45-1 cont.

I certainly hope that the decision to place the line is settled with sincere consideration to the affected families & ranchers in the area. We have all worked so hard for what we have, and many of us plan to pass our land on to the generations to follow.

Thank you in advance for your wise decision to save our local communities. Should you have questions, feel free to contact us.

Sincerely;

Gary & Colene Tarbell

37050 Road 192

Elderwood, Ca 93286

559-564-3941

Our children: Justin & Janette Tarbell & Fam 19260 Avenue 370 Elderwood
Robert & Tamara-Tarbell -Lea & Fam 37327 Millwood Elderwood

July 23, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/O Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida,

As a farmer, I want to address some concerns about the impact on agriculture by choosing route 2, through Antelope Valley and Elderwood, for the new transmission lines. We farm 100 acres of oranges and olives in the area affected by route 2, and we have just built a home facing the Sierras, west and south of route 2.

I am concerned about the lack of depth in the EIR regarding agricultural practices such as wells and irrigation, pest control, crop dusting, and growing and harvesting during construction and in the future.

It is my understanding that we must abandon existing wells which fall in the right-of-way. New wells cannot be drilled with the certainty of hitting water, or of sufficient water to irrigate the crop. The cost of drilling a new well is prohibitive, especially when considering the uncertainty of getting a successful water supply. I also understand that irrigation lines under the lines must be 3 feet underground. Water lines often develop leaks which must be repaired, and they are now buried in shallow trenches to make them easy to access. I have spoken with a number of farmers who feel they will lose their farms if they cannot continue to use the wells they have now. We own 27 acres of oranges directly in the path, with water supplied by the Sentinel Butte Water Company, and we stand to lose our water supply, and therefore our ranch.

Many crops grown in the path of line 2 use crop dusting as a means of delivering pest control and fertilizer. The power lines would interrupt this.

Growing and harvesting crops is not adequately addressed in the EIR. This area is part of the "Bread Basket of the World", a large variety of crops are grown here. We cannot afford to lose the land, or even one year's harvest, in the path affected by route 2. There are taxes paid to the county and state, as well as the federal government, on income from these crops.

High-voltage transmission lines in the path of Route 2 will have lower appraisal values. Homes and agricultural land will be worth less, which will also lower the tax base.

Route 2 goes over Indian and historical pioneer sites which cannot be replaced.

Tourism is a source of revenue for the area and would be affected by the sight of 150-foot-tall transmission lines going through the valley.

I46-1

I46-2

I46-3

I46-4

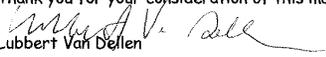
We are concerned about farm workers laboring under the lines. Studies have questioned the safety of long-term working under high-voltage transmission lines.

I46-5

I understand the need for new electric transmission lines and upgrading existing lines, and there is a viable alternative. Route 3 through the foothills affects no agricultural land, does not obscure the view of the Sierras from the valley. It has fewer negative environmental and agricultural impacts to the communities and the people. It is a viable alternative, especially with a minor adjustment to the route to avoid the vernal pools, and I strongly encourage you to reconsider your decision of the choice of routes. Choose a route that affects fewer people and fewer crops, with less economic impact.

I46-6

Thank you for your consideration of this matter.


Lubbert Van Dellen
36705 Rd. 194
Woodlake, CA 93286
559 786 5280

July 23, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/O Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida,

As a farmer, I want to address some concerns about the impact on agriculture by choosing route 2, through Antelope Valley and Elderwood, for the new transmission lines. We farm 100 acres of oranges and olives in the area affected by route 2, and we have just built a home facing the Sierras, west and south of route 2.

I am concerned about the lack of depth in the EIR regarding agricultural practices such as wells and irrigation, pest control, crop dusting, and growing and harvesting during construction and in the future.

It is my understanding that we must abandon existing wells which fall in the right-of-way. New wells cannot be drilled with the certainty of hitting water, or of sufficient water to irrigate the crop. The cost of drilling a new well is prohibitive, especially when considering the uncertainty of getting a successful water supply. I also understand that irrigation lines under the lines must be 3 feet underground. Water lines often develop leaks which must be repaired, and they are now buried in shallow trenches to make them easy to access. I have spoken with a number of farmers who feel they will lose their farms if they cannot continue to use the wells they have now. We own 27 acres of oranges directly in the path, with water supplied by the Sentinel Butte Water Company, and we stand to lose our water supply, and therefore our ranch.

Many crops grown in the path of line 2 use crop dusting as a means of delivering pest control and fertilizer. The power lines would interrupt this.

Growing and harvesting crops is not adequately addressed in the EIR. This area is part of the "Bread Basket of the World", a large variety of crops are grown here. We cannot afford to lose the land, or even one year's harvest, in the path affected by route 2. There are taxes paid to the county and state, as well as the federal government, on income from these crops.

High-voltage transmission lines in the path of Route 2 will have lower appraisal values. Homes and agricultural land will be worth less, which will also lower the tax base.

Route 2 goes over Indian and historical pioneer sites which cannot be replaced.

Tourism is a source of revenue for the area and would be affected by the sight of 150-foot-tall transmission lines going through the valley.

I47-1

I47-2

I47-3

I47-4

We are concerned about farm workers laboring under the lines. Studies have questioned the safety of long-term working under high-voltage transmission lines.

I47-5

I understand the need for new electric transmission lines and upgrading existing lines, and there is a viable alternative. Route 3 through the foothills affects no agricultural land, does not obscure the view of the Sierras from the valley. It has fewer negative environmental and agricultural impacts to the communities and the people. It is a viable alternative, especially with a minor adjustment to the route to avoid the vernal pools, and I strongly encourage you to reconsider your decision of the choice of routes. Choose a route that affects fewer people and fewer crops, with less economic impact.

I47-6

Thank you for your consideration of this matter.

Nancy Van Dellen
36705 Rd. 194
Woodlake, CA 93286
559 827 5909



7/23/09
Mr. Jensen Uchida,

Comment Letter I48

Dear Mr. Uchida,
We have 2 10 acre lots on our 37149 Rd 192, Woodlake property. We prefer the power lines not go near us.

I48-1

"As every man hath received the gift, even so minister the same one to another, as good stewards of the manifold grace of God." I Peter 4:10

Not only for ourselves but also we look forward to something worthy of our children.

Sincerely,

W Van Dellen
Wayne Van Dellen
37149 Rd. 192
Woodlake, Ca.
/ 93286

(559) 564-2581

Comment Letter I49

July 24, '09

To Whom it May Concern:
The S. P. E. Cross Valley Loop Project over routes 1, 2, and 6 would be disastrous. Route 3 is the only viable route as clearly pointed out again and again in last night's public meeting.

In light of the verifiable facts presented, the historical aspect, the humanitarian value including lives of families of future generations, route 3 is the only choice.

Surely Edison does not want to ruin his current good reputation by selecting any route other than Route 3. Surely Edison does not want to join the money grubber of this world who are placing dollars above all higher aspects of life.

I again respectfully submit

I49-1

MEMO

July 24, 2009

TO: Mr. Jensen Uchida

FROM: Kent and Gail Kaulfuss *[Signature]*

RE: Public Participation Meeting on the San Joaquin Cross Valley Loop Transmission Project

While we are grateful for the opportunity to give voice to our hopes for the outcome of this project, we were seriously disappointed at the lack of staff at the meeting last night. We realize that there was probably a much greater turnout than anticipated, but most of us were kept standing outside in 104° heat for more than 30 minutes because there were inadequate provisions for sign-in stations. The staff didn't have the sense to have people move into the air conditioned lobby and form a line, so we stood outdoors in the sweltering heat.

More importantly, when additional sign-in sheets were passed among the seats for people to fill in, no staff member monitored their progress, and as a result, sheets made it partway through the rows and then did not continue to the back. Dozens of people sitting in the rows at the back of the room never signed in. There was also no staff at the back of the room to take comment cards or letters from people who didn't stay to the end of the meeting and neither was there a designated drop box. These items ended up strewn loosely on a table along with partially completed sign in sheets, half-empty water glasses and other trash. Whether they ever made it to the people for whom they were intended remains a mystery.

As these meetings are a matter of public record, some effort should have been made to safeguard the information that is critical to this decision-making process. Not everyone present spoke and became part of the recorded meeting, and the written comments should have been treated with some semblance of importance and security.

Again, we are extremely grateful for the opportunity to be heard.

*that route 3 is the only
viable route.*

*James R. Canterbury
College teacher, Ret.*

↑
I49-1
cont.

I50-1

Comment Letter I50

KENT KAULFUSS

PO Box 44047 - Lemoncove, CA 93244 - (559) 816-9426 - FAX (559) 597-2127

**FAX LETTER TRANSMITTAL
COVER SHEET**

DATE: 7-28-09 FAX # 415-896-0332

TO: Jensen Uchida

COMPANY: C.P.U.C.

FROM: Kent & Gail Kaulfuss

#PAGES: 3 (including cover sheet)

SUBJECT: Cross Valley Loop

COMMENTS: It was brought to my attention that the attached letter (re: Draft E.I.R.) which we sent via Fed Ex, did not have the docket # A. 08-05-039 referenced on it.

Thanks,

Kent Kaulfuss

The material accompanying this fax contains confidential information belonging to the sender which is privileged. The information is intended only for the use of the individual or entity to whom it is addressed and may not be used for any purpose without the consent of the party providing this information.

If there are any problems with the material received, please contact the sender at the above phone or fax numbers. Thank you.

Comment Letter I50

July 23, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
DOCKET # A.08-05-039
Dear Mr. Uchida:

My wife, Gail, and I remain opposed to the proposed Route #1 as was addressed in our previous letters and testimony to the PUC, SCE and an Administrative Law Judge. The EIR failed to address the adverse effects that Route #1 will have on our adjoining property. Currently, SCE has a right-of-way with a 66 KVA line (outdated and in poor condition) that is four feet from our home on the north and east side which bisects our entire five acres. The proposed 220 KVA line right-of-way would run parallel to this existing 66 KVA line (with only 80 feet between them) and would be twenty feet from our home and detached garage on the south side, essentially putting our home right in the middle of three major SCE right-of-ways, creating an island of our home site. (See attached map.) This also creates a major health concern for us, being sandwiched between three major power lines. We have had no communication at all from SCE regarding this impact that would adversely affect our living standard and property value.

Because this proposed Route #1 right-of-way will follow our property boundary for approximately 650 feet, it would essentially isolate a strip of our property measuring approximately 65,000 square feet, or about an acre and a half. SCE might avoid obligatory acquisition or compensation cost relative to our parcel due to the fact that it is not part of their right-of-way acquisition.

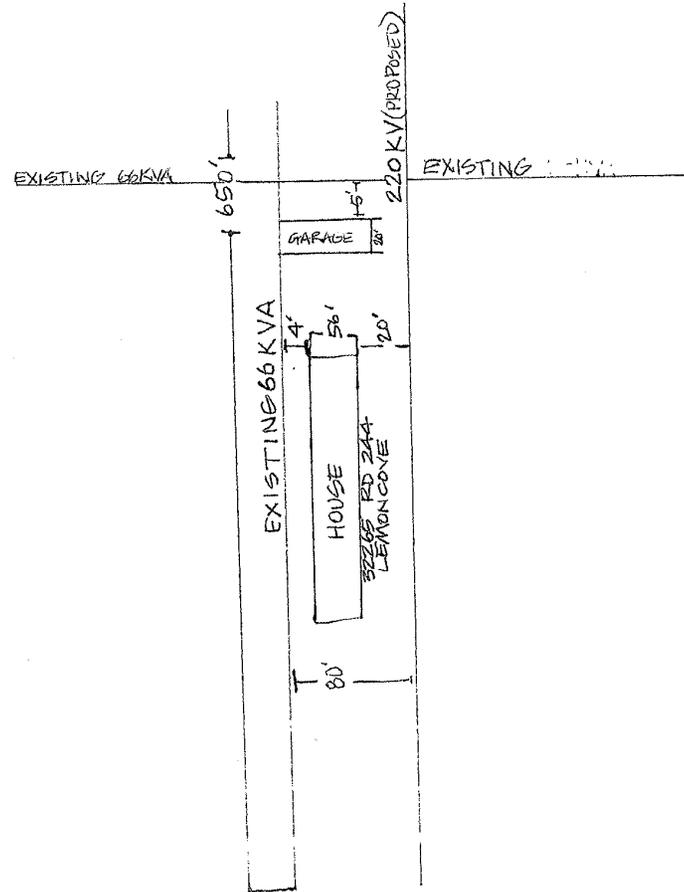
SCE's preferred route has caused tremendous controversy throughout the region. SCE's preferred route would devastate the environment, community and agriculture. The preferred route interferes with Farmersville's economic redevelopment plan, causes the loss of agricultural jobs, causes the loss of prime farmland, does not comply with the scenic corridor status along Highway 198, and would cause houses and major pipelines to be removed. The CPUC should continue to evaluate other routes plotted by SCE. Specifically, alternative Route #3 would utilize 19 miles of existing SCE right-of-way, require construction on grazing land, not prime farmland, and would have few, if any, mitigating factors to be resolved. Therefore, we recommend Route #3 as the least invasive of the proposed routes and the one that would only take minor adjustments to avoid the vernal pools.

Of all the three alternatives, the proposed Route #1 requires the greatest acquisition of right-of-way and has the most damaging impact on communities in its path. Thank you for your attention to this matter.

Respectfully submitted,
Kent Kaulfuss
Gail

Kent and Gail Kaulfuss
PO Box 44047 - 32265 Road 244
Lemoncove, CA 93244
(559) 816-9426

Att.



I50-2
cont.

Douglas Rydberg
 39500 C Millwood Dr.
 Woodlake, CA 93286
 (559) 564-0472

Jensen Uchida
 San Joaquin Cross Valley Loop Project
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, CA 94104-4207

July 24, 2009

Dear Mr. Jensen Uchida:

Recently, I became aware that the CPUC is exploring **Route 6** as well as **Route 2** for the **San Joaquin Cross Valley Loop Project**. As a resident and land owner who would be negatively affected by those routes, I would like to express my **strong opposition to both** and would appreciate you forwarding this letter to any and all appropriate individuals.

I oppose Routes 2 and 6 because:

- The Draft Environmental Impact Report (DEIR) does not adequately address the effects on ground water.
- Adversely impacts hundreds of families with lands adjacent to, or near the proposed route and decreases their property values.
- Destroys some of the last pristine acreage on the valley floor
- Causes extensive losses to farmland and infrastructure including wells, pipelines, wind machines, drive rows, etc.
- Violates both Native American village/burial sites and early pioneer historical sites.

I51-1

I51-2

I think that Route 3 might be a better idea because:

- 1) It uses more of the existing right of way. This meets the Garamendi Principles in SB2431.
 - A) Encourage the use of existing right of way by upgrading existing transmission facilities.
 - B) When construction of new transmission lines is required, encourage expansion of existing right of way, when technically and economically feasible.
 - C) Provide for the creation of new right of way when justified by environmental, technical, or economic reasons as determined by the appropriate licensing agency.
- 2) The route's primary negative, the Stone Corral Ecological Preserve, can be easily circumvented by moving the line just a little. The DEIR stops short with a statement on pages 5-7 with a statement which indicates that due to the sensitive nature of habitat in the Stone Corral Ecological Reserve that a bypass was not feasible. Evidence shows a "work around" of the reserve is possible and feasible.
- 3) There is less damage to intensive agriculture- permanent crops, wells, drive rows, etc.
- 4) The 100 year old Rector Line is low noisy and dangerous. The new line greatly reduces EMF transmissions.

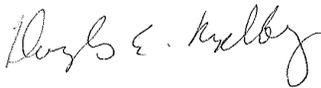
I51-3

I51-4

I51-5

Thank you for your attention and serious consideration of these concerns.

Sincerely,



Douglas Rydberg

Kaye D. Rydberg
 39500 C Millwood Dr.
 Woodlake, CA 93286
 (559) 564-0472

Duplicate (see above for coding)

Jensen Uchida
 San Joaquin Cross Valley Loop Project
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, CA 94104-4207

July 24, 2009

Dear Mr. Jensen Uchida:

Recently, I became aware that the CPUC is exploring **Route 6** as well as **Route 2** for the **San Joaquin Cross Valley Loop Project**. As a resident and land owner who would be negatively affected by those routes, I would like to express my **strong opposition to both** and would appreciate you forwarding this letter to any and all appropriate individuals.

I oppose Routes 2 and 6 because:

- The Draft Environmental Impact Report (DEIR) does not adequately address the effects on ground water.
- Adversely impacts hundreds of families with lands adjacent to, or near the proposed route and decreases their property values.
- Destroys some of the last pristine acreage on the valley floor
- Causes extensive losses to farmland and infrastructure including wells, pipelines, wind machines, drive rows, etc.
- Violates both Native American village/burial sites and early pioneer historical sites.

I think that Route 3 might be a better idea because:

- 1) It uses more of the existing right of way. This meets the Garamendi Principles in SB2431.
 - A) Encourage the use of existing right of way by upgrading existing transmission facilities.
 - B) When construction of new transmission lines is required, encourage expansion of existing right of way, when technically and economically feasible.
 - C) Provide for the creation of new right of way when justified by environmental, technical, or economic reasons as determined by the appropriate licensing agency.
- 2) The route's primary negative, the Stone Corral Ecological Preserve, can be easily circumvented by moving the line just a little. The DEIR stops short with a statement on pages 5-7 with a statement which indicates that due to the sensitive nature of habitat in the Stone Corral Ecological Reserve that a bypass was not feasible. Evidence shows a "work around" of the reserve is possible and feasible.
- 3) There is less damage to intensive agriculture- permanent crops, wells, drive rows, etc.
- 4) The 100 year old Rector Line is low noisy and dangerous. The new line greatly reduces EMF transmissions.

Thank you for your attention and serious consideration of these concerns.

Sincerely,



Kaye D. Rydberg

July 21, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco CA 94104-4207

Re: What should be Preferred Route (Route #3)

Dear Mr. Uchida:

The route preferred by SCE (Route #1) and that suggested by the DEIR (Route #2) are both infringing on the rights of humans vs the rights of small animals that live along Route #3.

Route #3 does not take out permanent crops along with the necessary drives, wells, irrigation systems and all else that supports production. Route #3 **might** affect some small animals. Even this affect can be mitigated by moving the poles slightly.

The City of Farmersville will be greatly impacted by Route #1. What is the City supposed to do with the land the lines would go through?? There goes all their plans for retail and commercial improvements along their road to Highway 198. Those planned business' would employ many people in an impoverished city. How are you going to replace those new jobs?

Route #3 would affect fewer people, jobs, and our cities' health.

Best regards,


Cheryl Furner

I52-1

Stacey Kelch, RN, BSN
17394 Ave. 288 Exeter, CA 93221
Home: (559) 592-7266
Email: staceygirl78@yahoo.com

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/O Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
Fax 415-896-0332 Email: sjxvl@esassoc.com
RE: proposed Southern California Edison: San Joaquin Cross Valley Loop 220KV
Transmission Line Project

My name is Stacey Kelch. I am a registered nurse that resides in Exeter, California. I am writing this letter with serious concerns related to the proposed Southern California Edison: San Joaquin Cross Valley Loop 220KV Transmission Line Project.

I reside in close proximity to a portion of the proposed route 1. As I was unable to attend the July 23rd Visalia Convention Center meeting, I am writing this letter after reviewing the Environmental Impact Report Summary with serious concerns.

As my husband and I, who is a General Contractor, reside near the proposed project route 1 (within 1 mile), we would be directly affected by this project, so as you may understand, it is of great importance to us that specific impact studies on all aspects of this project are explored prior approval of Route 1. These include environmental, economic, health, aesthetic, historic, and biological related issues, to name some.

On a personal note, my family runs a small family farm near Exeter which would also be directly affected by this project. This is a small family business and residence. I understand that people need power and energy, and in the grand scheme of things this small family business may seem insignificant, but in this struggling economy all aspects of this project deserve to be explored and investigated fully to determine that the proposed route by Southern California Edison is indeed in the best interest of all. As the DEIR summary suggests, Route 1 is not the best choice. Instead, a slightly altered route 3 would be the ideal choice with the least total impact.

I urge Southern California Edison and the Public Utilities Commission to consider and proceed with Alternate Route 3 and abandon the proposed route 1. As a professional in the medical field, a main concern is the lack of attention given to impacts from a 220KV power line to health. Reasons to proceed with Alternate Route 3 include:

- 1.) The DEIR does not fully identify associated risks related to patients with implanted pacemakers or Implantable Cardioverted-Defibrillators (ICD) living or working near the proposed route 1. The report identified cardiac pacemakers, but failed to identify patients with ICD devices:

- a. ICDs are pacemaker-like devices that continuously monitor the heart rhythm, and deliver life-saving shocks if a dangerous heart rhythm is detected. They can significantly improve survival in certain groups of patients with heart failure who are at high risk of ventricular fibrillation (VF).
- b. Cardiologists specifically instruct patients with these implanted devices to avoid strong magnetic fields (such as high voltage power lines), large magnets (such as those in MRI machines), antennas, arc welders, and industrial equipment. Electrical equipment and appliances may interfere with these devices.
- c. According to the Table ES-4 Summary of Impact and Mitigation for the Proposed Project, 4.7-10, Hazards and Hazardous Materials, there was reported a, "less than significant residual impact," related to, "electric field interference with cardiac pacemakers." **There is no mention of cardiac ICD devices in this report summary. This also suggests that there is no significant impact related to these high voltage lines which is contrary to information given by cardiologists or health professionals.**
- d. I urge that further studies be made before proceeding with this project as route 1 and 2 and 6 are in close proximity to residential areas, specifically the communities of Ivanhoe, Exeter, Farmersville, Woodlake, and Lemon Cove, California.
 - i. Estimated populations for these nearby communities include:
Exeter: Population in July 2008: 9,963. Farmersville: Population in July 2008: 10,056. Woodlake: Population in July 2008: 7,418. Lemon Cove: Population in July 2007: 313. Total approximate population living near suggested project estimated at : 27,750.
 - ii. Numbers of those in the surrounding area with permanent pacemakers or ICD devices are unknown, therefore, further studies should be completed to investigate this issue further.

- 2.) Lack of scientific study on possible related health risks associated with living in or working in close proximity to high voltage power lines:
 - a. Exeter: Population in July 2008: 9,963. Farmersville: Population in July 2008: 10,056. Woodlake: Population in July 2008: 7,418. Lemon Cove: Population in July 2007: 313. Total approximate population living near suggested project Route 1 estimated at : 27,750.

- 3.) Route 3 uses more of the existing right-of-way, which meets the Garamendi Principles in SB2431.

I53-2
cont.

I53-1

I53-2

I53-3

I53-4

- 4.) Route 3's primary criticism is that it is too near the Stone Corral Ecological Preserve. This can easily be avoided by slightly changing the course of route 3.
- 5.) There is much less damage to intensive agriculture land including permanent crops, wells, drive rows, etc., as mentioned in the DEIR summary, Table ES-3 and Table ES-4.
- 6.) The 100 year old Rector line is low, noisy, and dangerous. The new line would greatly reduce EMF emissions.
- 7.) Routes 1, 2, and 6 have more negative environmental impact to agriculture, communities, and people.
- 8.) The land and business impacts to the city of Farmersville were not adequately addressed in the DEIR.

↑
153-4
cont.
↓
153-5

The DEIR has done a good job of pointing out that there are areas that would be directly impacted by route 1, the largest seeming related to agriculture, which is a main source of income in this area. The DEIR also shows that there are many aspects of this project that have failed to be addressed in detail. Evidence suggests that with slight modification, Route 3 would be the ideal choice for environmental, economic, aesthetic, and health related reasons. **I strongly urge the PUC to deny project 1 and instead approve a modified proposal of route 3 for this project.**

Though these communities may seem small, the impact of proposed route 1 may have unknown negative effects on this economy and community. Exeter is a small town that prides itself on its small town charm. There are small shops and beautifully decorated murals. The surrounding area is filled with agriculture land and citrus groves, which add to the character and economy of this small community. The town sits at the bottom of the Sierra Nevada foothills. It is a charming little stop for tourists on the way to the Giant Sequoia forest.

↑
153-6
↓

It may not seem like much to some, but it is for those that reside, work, and travel here. It is for the farmers that would lose income and production with the loss of orchard trees or row crops to make way for this power line. For those whose houses are directly in its proposed path or in near proximity. **My plea is that the PUC considers all aspects of the impact of this project prior to approval, and instead approves Route 3, which as the DEIR supports, would have the least impact, requiring only slight modification.**

Thank you very much for your time and consideration.

Stacey Kelch, RN, BSN
17394 Ave. 288 Exeter, CA 93221
Home: (559) 592-7266
Email: stacegirl78@yahoo.com

July 26, 2009

Via: Email (sjxvl@esassoc.com) and U.S. Mail

Mr. Jensen Ushida
San Joaquin Cross Valley Loop Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

**RE: Edison's San Joaquin Cross Valley Loop Application, A08-05-039
Comments Regarding Draft Environmental Impact Report**

Dear Mr. Ushida:

We have farmed citrus in the area of the Proposed Project (Alternatives 1, 2 and 6) for over 20 years. We located in this area because of the prime agricultural soils, abundant water and scenic vistas. Several of our properties would be affected by the project and two of our citrus farms—20 acres of Cara Cara Navel and Grapefruit near Lindcove and 30 acres of Satsuma Mandarins in Lemon Cove-- are directly in the path of proposed Alternative 1. Following are our comments regarding the DEIR.

The DEIR concludes that the aesthetic impacts would not be significant. We very vigorously disagree. While visual impacts are attenuated with distance, such impacts will be very substantial and significant proximate to project. Within distances of no less than ¼ mile of the towers and lines, they would wholly dominate the views and vistas (now of agricultural land and the High Sierra). In other words, under any of the alternatives, at least 10 square miles (and probably more) would be significantly impacted. Public comments at scoping and other public meetings—and lesser home and land valuations in areas of major transmission lines-- make clear that these impacts are significant both qualitatively and quantitatively.

↑
154-1
↓

The DEIR correctly identifies the temporary and/or permanent removal of farmland as a significant impact of the project. We believe, however, that the DEIR materially understates both the direct and indirect impacts.

In discussing Impact 4.2-2, the DEIR states that SCE policy requires 50 foot maintenance buffer surrounding each pole/tower, yet for calculational purposes uses the much smaller "footprint" area because, in some instances in the past, SCE has not enforced "what should be maintenance areas..." This methodology improperly and inappropriately assumes no future enforcement of SCE's maintenance area regulations. Properly calculated, the "permanent" take of farmland for towers/poles and related maintenance areas would be at least 4 times greater than stated in the DEIR. All analyses of permanent impacts should be appropriately modified.

↑
154-2
↓

The DEIR states that the impacts on hydrology/groundwater would not be significant. Giving the scale of tower/pole subsurface construction and foundations, we question this conclusion. Many of the foothill wells in the path of the several alternatives are served by bedrock crack wells, not extensive aquifers. Disruptions of these "cracks" are will have significant impacts on local and, possibly distant, hard rock wells.

I54-3

We likewise believe that many farm land impacts identified as "temporary" and "mitigable" in the DEIR would likely result in additional, substantial and permanent takes of farm land. For example, Alternative 1 proposed a 100 ft wide 660 ft long ROW along the north side of our Lemon Cove ranch. In that corridor we have, among other things, a well/pump/filtration station. It is debatable whether, in an area of hard rock groundwater, the well could successfully be relocated. Nor are alternative sources of water available (The DEIR's statement that SCE could mitigate by providing other water is, simply put, wrong. There is no excess, but rather a deficit, of water in the affected areas.) The result of losing water is, of course, the indirect, but nonetheless permanent, "take" of farmland.

I54-4

Other infrastructure impairments may likewise accentuate the "take" of farmland. For example, in the 660 ft corridor of our Lemon Cove ranch we have, in addition to the well/pump/filter station mentioned above, a pressure pipeline and an important surface water drain. Both must function to fully utilize the property. Without either, more land would be lost to fruitful production. Further, in our case as in many others, we have infrastructure located off our property, including a mile-long 6 inch transite pipeline providing our connection to the Lemon Cove ditch (at least half of which is directly under proposed route 1) and a major lift, pressurizing and filtration station which is likewise directly under the proposed route. Further, the Lemon Cove Ditch supply pipeline also runs directly under proposed alternative 1. These many improvements are essential to our farming. Relocating any of those improvements would not only be extraordinarily expensive but, possibly, impossible (necessitating new easements and the like).

I54-5

The above discussion of "indirect" damage to agricultural infrastructure makes clear to us that SEC has grossly underestimated the ROW acquisition and related costs in developed agricultural areas. The direct take of our Lemon Cove property would amount to a 660ft x 100ft corridor, approximately 1.5 acres. Assuming \$20,000 per acre, the cost would be about \$30,000. It is plain that the cost of mitigating "temporary" infrastructure impacts would be far greater. For example, drilling and developing a new well, if possible at all, would cost \$30,000 to \$80,000; replacing a 1 mile long, 6 inch pipeline would cost, installed, at least \$10,000 to \$20,000; and relocating a pumping, pressuring and filtration plant (assuming the necessary easements could be obtained) would cost, installed \$5,000 to \$10,000. In

I54-6

other words, the costs to mitigate the indirect "temporary" impacts on our Lemon Cove farm would amount several times the costs of the "permanent" taking. We believe such multipliers are needed wherever the proposed project passes over developed, intensively-farmed lands.

I54-6 cont.

Respectfully submitted,

By:

Jay and Nancy Cutler
Tulare County Citrus Farmers
July 26, 2009

125 Carmel St.
San Francisco, CA 94117
(415)664-0980
(415)664-1935 (fax)
Jnjcjl@aol.com

Comment Letter I55

NAY

Comment Letter I56

July 27, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco CA 94104-4207

Re: Docket Number A.08-05-039

Dear Mr. Uchida:

Just looking at the aerial map makes it obvious that route 3 should be chosen for the electrical lines. It goes through uninhabited land, at least uninhabited by humans. It is time that humans became part of the considerations. The fairy shrimp and/or other animals that live there can live just fine around the power poles.

Sincerely,

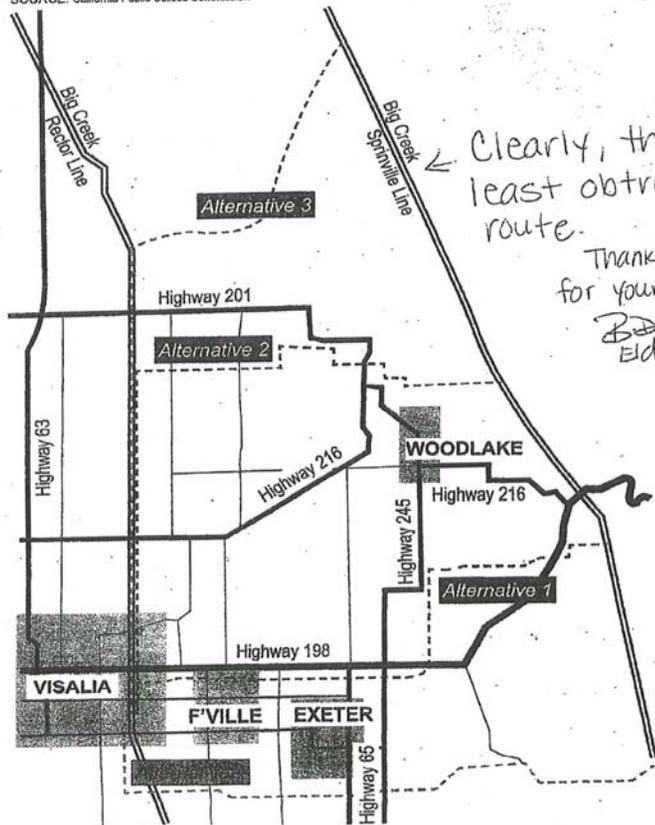
Lindsay Turner
Lindsay Turner
1688 Tonini Dr. #36
San Luis Obispo CA 93401

I56-1

WEDNESDAY, JULY 15, 2009 Sun-Gazette

San Joaquin Valley Cross Transmission Loop

SOURCE: California Public Utilities Commission



Clearly, the least obtrusive route.

Thank you for your consideration
B. Davis
Elderwood, CA

I55-1

From: ferders @dslextreme.com [mailto:ferders@dslextreme.com]
Sent: Tuesday, July 28, 2009 10:39 PM
To: San Joaquin Cross Valley Loop Project
Subject: Docket Number A.08-05-039

P.A.C.E.

(Protect Agriculture Communities Environment)

Docket Number A.08-05-039
July 28, 2009

Dear Mr. Jensen Uchida,

My name is Delia Garza. I live in Three Rivers, Ca. I received an e-mil from Bruce Geiger, GEIGERBR@aol.com today, Monday, July 27, 2009 at 9:25 A.M., about my final comments to the (CPUC)-California Public Utility Commissioner due before Friday, July 31, 2009 for

P.A.C.E. (Protect Agriculture Communities Environment)

I am a proud woman, happy with my job as a store clerk at the Visitor Center in Sequoia Kings Canyon National Park where it's so green in the summer and so white in the winter. Our visitors come from all over the world. Visitors from all over the would look for nature within us. We carry the responsibility to tell these visitors about nature. Consequently there are those days when time in the visitor center is so sad for children seem in forgetting nature in their life.

Life becomes so depressing when I hear children visiting our visitor center not recognizing nature nor understanding the meaning of nature, no enthusiasm at all whatsoever, how very sad . . . What nature would be destroyed, you ask? The Oaks Preserve falls on north of Highway 198 from the Kaweah Oaks Preserve on Road 180 through the lands of the Kaweah River drainage, and Mill Creek and Packwood Creek in Visalia. The Kaweah Oaks Preserve is a wonderful place to study and learn the naturals of the wild. This remarkable place has interesting species.

157-1

For example the "Avian Bird," which comes to visit and multiply in the spring. If these power line covers over this area, these birds and other river flora and fauna creatures will not be able to multiply and live in the Kaweah River flood plains and our people of tomorrow will not know any of those nature wonders, how much more can we take nature from our children? CPUC, please don't take our Nature away . . .

The CPUC project will vanish nature from children's imagination; for, the CPUC project will jog over twice through Highway 198 in which will destroy the Kaweah Oaks preserve, which COS, College of the Sequoias, always uses as class field trips. In addition, this requirement goes on for another 2 miles of large power lines due to this jog but, why? The Alternate Route 2 is a much shorter line and more cost effective. It would be much shorter which would go through mostly commercial areas, not homes. Why not keep the old tree fashions in the back yard instead of towers. Route two is a much better and safer option for our people's since our economy is in great danger of shortages in this County.

157-1
cont.

Delia Garza

But godliness with contentment is great gain. For we brought nothing into the world, and we can take nothing out of it. But if we have food and clothing, we will be content with that.

1 Timothy 6:6-8

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

NAY

Commenter Name/Nombre: Rhonda Montgomery Date/Fecha: _____
Address/Dirección: 4621 W Delta Vista, CA 93291

Comment/Comentario: Please choose the route that least effects farms and ranches. Option 2 will destroy my familis farm and orange ranch in the Road 164 area. You will effect ranches and animal above and beyond the reports you have put together and the economy of these areas will be forever changed.

158-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto

Paper Copy/Copia Impresa

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: JACK Pendley Date/Fecha: July 23-09
Kathy Pendley
Address/Dirección: _____

Comment/Comentario: I AND MY WIFE CAME HERE ABOUT 25 YEARS AGO, WHILE TRAVELING THRU THE AREA TO SEE THE REDWOODS. WE FELL IN LOVE WITH THE FOOTHILLS AND THE MOUNTAINS. WE LOVED THE BEAUTY OF THIS AREA SO MUCH THAT WE BOUGHT A 30 ACRE PARCEL IN LEMON COVE AND MOVED OUR SELVES FROM ALASKA TO HERE. WE'VE BEEN HERE EVER SINCE. BUT I WILL HAVE TO SAY IF I WERE TRAVELING THROUGH THE AREA WITH THE LINE RUNNING ALONG 198, I PROBABLY WOULDN'T STOP MUCH LESS BUY PROPERTY HERE. IT SEEMS TO ME THAT ALTERNATE RT 3 WOULD BE THE BEST ROUTE TO USE. AND IT SEEMS THAT MOST OTHERS FEEL THE SAME WAY.

159-1

Thank you
Sincerely Jack + Kathy
Pendley

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto

Paper Copy/Copia Impresa

Public Comment Card Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

NAY

Commenter Name/Nombre: DOYLE RITCHIE Date/Fecha: 7/25/09
Address/Dirección: PO BOX 7777 Visalia, CA 93290

Comment/Comentario: _____

I farm oranges on Road 164 and option 2 will come through the well and water area of the ranch. The well on the property can not be replaced or moved with 100% percent assurance that the production of water would ever be the same.

Please choose option 3 or another that would not destroy farms and disrupt the fragile economy in this area.

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Public Comment Card Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: CLIFF ROKK Date/Fecha: 7/28/09
Address/Dirección: 28034 MILLWOOD DR, WOODLAKE, CA 93286

Comment/Comentario: I ATTENDED THE HEARING AT THE VISALIA CONVENTION CENTER ON JULY 23, 2009. AFTER LISTENING TO TESTIMONY AND REVIEWING THE DEIR, I AM INCLINED TO SUPPORT THE ALTERNATE ROUTE 3. IT IS THE ONE OPTION THAT SEEMS TO CAUSE THE LEAST HUMAN IMPACT, AND THE MINIMUM OF TURMOIL AND CONTROVERSY. I WOULD EXPECT THAT ALT. 3 IS PROBABLY MORE DIFFICULT LOGISTICALLY, AS WELL AS MOST COSTLY, ESPECIALLY AS IT WOULD CREATE A SIGNIFICANT REMOVE-AND-REPLACE SITUATION ALONG A LENGTHY STRETCH OF THE EXISTING SCE TOWER EASEMENT. HOWEVER, AS FAR AS EFFICIENCY AND CONSOLIDATION IS CONCERNED, UTILIZING EXISTING EASEMENTS AS MUCH AS POSSIBLE SEEMS TO BE A BETTER STRATEGY AS THE POPULATION INCREASES AND BECOMES MORE RESISTANT TO SIGNIFICANT UTILITY INFRASTRUCTURE IN THEIR "BACKYARD." IS SCE LOOKING INTO OTHER TECHNOLOGIES FOR POWER GENERATION AND DELIVERY? I HEARD THAT PG&E IS WORKING ON A PROJECT TO "BEAM" SOLAR ENERGY FROM A SATELLITE. IS THIS FAR-FETCHED OR IS IT REALLY POSSIBLE? THANK YOU. CR

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

I60-1

I61-1

Instructions:

You may submit your comment regarding the San Joaquin Cross Valley Loop Transmission Project in writing using the form on the other side of this sheet. Please fold and staple this form and mail it to the address below by July 31, 2009. You may also fax this form to: (415) 896-0332.

Instrucciones:

Se pueden someter por escrito los comentarios sobre el proyecto, " San Joaquin Cross Valley Loop Transmission Project ", usando la forma que está en la siguiente página. Por favor doblar, engrapar y enviar esta forma a la dirección indicada antes del July 31, 2009. También, se la puede enviar por fax a: (415) 896-0332.



NAEP
RECEIVED
JUL 30 2009
ESA

San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

941044248 C018

39924 MILLWOOD DR
WOODLAKE, CA 94286

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Connie Sing Date/Fecha: 7/28/09
Address/Dirección: 533 Santa Rosa, Visalia, Ca 93292

Comment/Comentario: _____

Clearly the best route is route 3 which is most out of the way & causes the least disruption. It uses more of the existing lines. Route 1 is very unfair to the City of Farmersville and destroys the scenic drive to Sequoia National Park! Every route proposed except Route 3 disrupts people & agriculture. Please make Edison consider the damage to cities / people / agriculture and decide for the people by choosing Route 3.

C. Sing

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto

Paper Copy/Copia Impresa

**Before the Public Utilities Commission of the State of California –
Application No. 08-05-039**

**Submitted as PUBLIC COMMENT on the
San Joaquin Cross Valley Loop Transmission Project –
Draft Environmental Impact Report**

I am representing my immediate family (names and addresses at the conclusion) and our family ranch (in our family for 150+ years) in this presentation of comments on the Draft Environmental Impact Report (DEIR) prepared for the CPUC and submitted June 2009.

Thank you all for listening to us and including in the DEIR some of the points we made at the various scoping meetings held before the DEIR was completed.

I will refer to some testimony that has been received by the CPUC from various individuals/cities.

1. General re: Alternate 3.

I will start by saying that the DEIR does not take into account the fact that the Edison Company undoubtedly has some plan to upgrade and replace power lines and towers on the route named Alternate 3. On page 4-1 of the DEIR it states that the plan for upgrading the 1.1 miles of the existing right of way (ROW), included in all Alternate routes in question, is to remove old towers, replace with new towers and lines on the western side of the existing ROW. This clears the eastern side of the existing ROW for the new construction.

The plan is to remove 26 existing towers (double towers = 13 sites) and replace those towers with 7 towers (7 sites). So basically, if that pattern was to be repeated for the length of the route, to upgrade/replace the existing power lines, there would be essentially three-quarters (3/4) the number of towers at one-half (1/2) the number of sites as are on the present ROW. The towers and lines will be replacing lines that are aging, leaking and noisy with new technology, quieter w/less EMF leakage and higher lines except at the bottom of the sag (32 feet minimum).

If one includes another tower at each site for the new lines to be constructed, (two towers per site) there still would be only one-half (1/2) the number of original towers. These pairs of towers would be placed essentially twice the distance apart as the old pairs of towers. One-half (1/2) fewer sites than at present.

If this process can be repeated on the length of the existing ROW of Alternate 3, I would suggest that this could be proposed as an alternate route that is not now included in the DEIR. This alternate route would be able to utilize the existing ROW of Alternate 3 and possibly upgrade/replace the existing lines at the same time. "Recycle" the ROW and plan, construct and pay for one project vs. two.

I63-1

This Alternate route would serve two purposes. Upgrade and replace the old towers and lines with new updated technological lines and place new lines at the same time. Thus, not dividing the resources it will take to construct two separate lines in two separate ROW, and saving money for Edison by doing the work sooner, in a more depressed economy than it will be when the economy has recovered (10 years down the line).

I63-1 cont.

Page 4.1-54 of the DEIR contains what I believe to be misleading information about Alternate 3. "Within this existing ROW, Alternate 3 would pass within 300 feet of approximately 214 residences." The current power lines already pass those same residences and other developments under construction and in planning.

The arguments posed by some persons in the testimony on behalf of the city of Visalia are more or less 'moot' points. (Testimony of Donald Fulbright, pp 2-4) The effect of newer power lines and towers may have a visual impact on the surrounding properties, and for a wider viewing range than the old lines, however, with fewer tower sites, that impact may not be as serious as stated in that testimony. Using current technology for both towers and lines would make the areas surrounding those lines quieter, safer and more visually acceptable (i.e. one-half the number of tower sites as are presently seen).

I63-2

Regarding the same testimony about the value and sale ability of the mentioned property, I believe that with current technology, and fewer towers farther apart, the area will be perceived as safer, and more open. The ROW under the lines could be landscaped in a way that made it an asset to the surrounding properties. (Walking paths etc.)

2. Agricultural Impact

I was pleased to see on p. 4.2-16 of the DEIR the mention of the fact that the loss of productive farmland/orchards in the new ROW of the "Proposed Route" was seen as "significant unmitigable" and that the "Proposed project would contribute incrementally to" the decline in acreage of farmland in Tulare County.

The majority of the land required for the ROW of the "proposed project" is in production by mature orchards/etc and on farmland of "prime importance", "statewide importance", etc. This land is an integral part of the local economy; the farm owners, the businesses they frequent, the cities and the county. Decrease the acreage of productive farmland and it hurts the whole community, county and even the state. If an alternate can be used that does not have such an effect on existing producing farmland, it would be a boon to all involved.

I63-3

The DEIR, on p. 4.2-20, is misleading in that it states that approximately 95% of Alternative 3 crosses farmlands of "statewide importance", without noting that most of the lands affected are already crossed by the existing ROW. The majority of new land crossed by the proposed ROW for Alternate 3 is grazing land which may be included in this and other designations.

Even if both lands are listed as "Prime Farmland", or "Farmland of Statewide Importance" or other, the use of grazing land in the Alternate 3 ROW cannot be compared to the use of mature orchards and farmland that is in production and will be converted to unusable land by the "proposed project" ROW.

If the "proposed project" ROW is selected, there will be more agricultural land lost than that stated in the DEIR. According to testimony by the Farmersville City Manager, p. 5, "The Proposed Project will displace 15+ acres of prime commercial and industrial land, requiring expansion of development boundaries," in accordance with Farmersville's Land Use, Planning and Policies, "likely to be on Prime Agricultural land." So, the total acreage converted from agriculture to non-agriculture by the "proposed project" will be increased. "Expansion of development boundaries to accommodate the Urban Land lost due to impacts associated with the Proposed Project will lead to the permanent reduction of agricultural lands." p. 7

The DEIR has recommended Alternate 2 for the project. At the July 23 Public Comment Session in Visalia, CA, property owners told us about their unique well systems that cannot be replicated. Loss of these wells would cause the permanent loss of over 200+ acres of productive orchards due to inability of delivering water to the orchards.

3. Economic impact

Besides the effects mentioned above, there are other economical effects of choosing the "Proposed Project" route. From the Farmersville City Manager's testimony, p.2-3, Farmersville city will lose a planned Industrial Park with up to an eventual 900 jobs and much investment and tax revenue. The Industrial Park project is transected by the "Proposed Project" ROW. This information should be included in the DEIR and in the final EIR. This makes the effect of the "Proposed Project", in economic terms, much more costly for the community than is stated.

The loss of monies to the community due to the loss of agricultural land stands as noted in all of the above comments when considering the "Proposed Project" versus Alternate 2 or Alternate 3.

4. Ecological impact

Referring to the testimony of Dennis R. Keller for the Kaweah Delta Water Conservation District (KDWCD), filed for the CPUC on May 30, 2009, an area of concern has not been included/considered by the DEIR. The KDWCD has obtained two properties of unique and incomparable qualities which "offer significant opportunities for habitat protection, restoration and enhancement within the Kaweah River Corridor" (3.)

This property will be crossed by the "Proposed Project" route. It is "highly unlikely" that the KDWCD would be able to find "comparable replacement property" for

the purposes mentioned above. "Most such lands have been developed to farming...are not available for habitat restoration...do not have the inherent natural characteristics of" the property in mention. (6.) Mr. Keller comes to the conclusion that "obtaining an easement" for the transmission lines over this property will be much more costly than was estimated. (7.)

Regarding Alternate 3, the DEIR p 4.4-8 states that critical habitat for Vernal Pool Fairy Shrimp is contained in a portion of the Stone Corral Ecological Reserve. "Alternate 3 would traverse this area for approximately one mile." As one can see from Figure 4.4-4, and as was pointed out in the Public Comment Meeting, July 23, the existing lines already traverse that area. When the existing lines on Alternate 3 are upgraded/replaced, a plan needs to be in place to make the improvements/replacements with a minimum of impact to this area. Disturbance of this area has been a big objection to the use of Alternate 3 for the Edison project.

An Alternate route "3A" was mentioned at the July 23 meeting which avoids the Vernal Pools, if not the Reserve. This Alternate "3A" bypasses the area in question by the use of an alternate unused ROW. The use of such a bypass could conceivably cut disturbance in this area to an absolute minimum. Utilize the bypass for the new lines, pull the old lines that cross the area in question and, if possible, leave the old towers in place. There would be no real traffic or disturbance of the area in question, or if there was need, it would be minimal. I think this is a really promising solution to be investigated.

5. Public Service addition

DEIR p. 4.12-11,12. It is not mentioned that the creation of a ROW over Stokes Mountain, Alternate 3, could function as a fire break or access road for emergency equipment. In case of a fire or accident involving persons, Fire apparatus or emergency vehicles could use the ROW to gain access to areas not now accessible. The ROW would be useful in such emergency situations and would also be a line defensible by fire personnel in case of a wild-land fire.

6. Land acquisition

As stated above, the majority of the new land on Alternate 3 that would need to be acquired is grazing land. This land is owned by a minimum number of persons. Acquisition of a ROW over these lands will be much easier and less expensive in time and money spent than the acquisition of land for a ROW for the "Proposed project".

The "Proposed project" ROW will include land owned by over 300 individuals/corporations etc. Most of these individuals object strenuously to the use of their land for this project. Many are farmers and the loss of a portion of their land even though it seems small in area will have a definite negative impact on their livelihood and continued existence in their vocation. Negotiating and meeting and eventually, with

I63-4

I63-5

I63-6

I63-6 cont.

I63-7

I63-8

I63-9

some, legal action will take time and money that is not included in the DEIR. Appraisals for land value, negotiations with those who have already had independent appraisals done, all of this will take time and cause many delays in the "Proposed project". These costs and the time involved have been underestimated in the DEIR, if they have been mentioned at all.

I would encourage the final EIR to recommend Alternate Route 3 with the bypass mentioned called "3A" to the CPUC for the preferred/recommended route for the Cross Valley Transmission project proposed by Edison.

Comparisons: Cost:

Construction: Using Alternate 3 and upgrading the existing lines.

Vs.

Constructing two separate routes, the "proposed project" and then Alternate 3.

Acquisition Time: Alternate 3 - Acquiring ROW property from a limited number of land owners over mostly grazing land.

Vs.

Proposed route - Acquiring new ROW property from 300+ owners who are opposed to the route.

Agriculture: Alternate 3 - Existing ROW and new ROW over mostly grazing land.

Vs.

"Proposed project" - 17+ miles of new ROW over mature productive farmland.

Potentially 15+ more acres of Prime Agricultural land displaced by the City of Farmersville to replace the 15+ acres of prime commercial and industrial land displaced by the Proposed Route.

163-9 cont.

Economics: Alternate 3 - as stated above

Vs.

Proposed route - economic impact on affected land owners, those businesses, workmen, etc. who are involved in that farming operation.

City of Farmersville, loss of 900+ potential jobs, tax revenues, and businesses that would be the result of the planned Industrial Park.

Environment: Alternate 3 - solve the problem of working in the Vernal Pools by using the suggested bypass (Public Comment Meeting, July 23) around the area. Leave the existing towers, pull the old lines and thus make the impact on that area minimal.

Vs,

Proposed route - affecting the land acquired by the Kaweah Delta Water Conservation District for the purpose of "habitat protection, restoration and enhancement within the Kaweah River Corridor" (Dennis R. Keller for the Kaweah Delta Water Conservation District)

In conclusion:

If Edison is successful with the "Preferred Project" route, the old lines in Alternate 3 will be upgraded and replaced, probably in the not too distant future. One has only to look at the DEIR p. 4-1.

I believe that the estimated higher cost/longer period of construction of Alternate 3 when compared to that of the "Proposed Project" pales in comparison to the cost in time, money & construction of acquiring the new ROW for the "Proposed Project", constructing power lines along that ROW and then upgrading/replacing Alternate 3.

As pointed out in the public comment meeting of July 23, the Vernal Pools on Alternate 3 are already traversed by the existing ROW and power lines. An Alternate route 3A which can avoid crossing the Vernal Pools by using a bypass was suggested. Even if the "Proposed project" is selected and constructed, Edison will have to work within the Stone Corral area or bypass it.

I would ask you to recommend Alternate 3, with the bypass around the Vernal Pools. It is by far the best solution with the least economic, agricultural, ecological effect on the citizens of the area that Edison serves. Those citizens are Edison's paying customers and are already affected in a negative way by the economic troubles of the

163-9 cont.

163-10

7.29.09

Comment Letter I63

Comment Letter I64

state and the country. Choosing the "Proposed Project" route will make circumstances worse for all individuals involved. In some cases it will make the difference between staying in business and being a productive member of the local community and economy, and bankruptcy, sale of properties and ruin.

Thank you for allowing me to comment.

Patricia Whitendale for Patricia L Whitendale Revocable Trust,
29349 Road 152, Visalia Ca 93292

For myself and:

Marjorie R Whitendale for Earl C and Marjorie R Whitendale Trust
29305 Road 152, Visalia, Ca 93292

William C. and Claudia A. Whitendale 15203 Ave 292, Visalia Ca 93292

William C. Whitendale (son) 2738 East College Ave, Visalia, Ca 93292

Jonathan K. Whitendale 2738 East College Ave, Visalia, Ca 93292

Mathew S. Whitendale 4147 East Murray, Visalia, Ca 93291

I63-10
cont.

Mr. Jeremy Uhlida
EPC Project Manager
225 Bush St. Room 1700
San Francisco, CA 94104-2201

Re: Cross Valley Loop in Tulare County, California
for Transmission of Power.

I am writing to ask you to consider using
Route 3, instead of using the proposed Line 2
through Elderwood.

I am a second-generation owner of citrus and
saddle property which lies quite near the proposed
Line 2. Our family has owned this property since
1914, and I have children and grandchildren who
live near Elderwood in a very attractive area
with productive farm land and scenic beauty.
Many people have chosen to live here.

The Power Line on Route 2 will destroy many
acres of good producing agricultural crops and
create a very unattractive slash sight through
Elderwood. Owners have invested a lot of
money to develop this land and many
valuable acres will be permanently lost.

Alternate Route 3 is available, which
seems to be the more logical Route to
use. Instead of either Route 1 or 2,
Route 3 would be far less destructive to
developed property and not destroy the
natural attractiveness of the settled
area.

Thank you for your consideration of
this matter.

Sincerely,
Lenora M. Graves,
Very concerned citizen.

LENORA M GRAVES
20506 AVENUE 380
WOODLAKE CA 93286

I64-1

Public Comment Card
 Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
 Draft Environmental Impact Report

P.O. Box 44001
 Lemon Cove, CA 93244-0001
 July 29, 2009

Commenter Name/Nombre: BOWEN BRENDA McMAHON Date/Fecha: JULY 25 09
 Address/Dirección: 798 N PEPPER WOODLAKE / 1 ACRE HOMESITE RD 197 ^{ELDERWOOD}

Comment/Comentario: WE CURRENTLY LIVE IN WOODLAKE 798 N. PEPPER. WE HAVE A
ACRE OF GROUND ON RD 197. WE HAD BEEN LOOKING FOR A HOME SITE FOR 20 YEARS.
WE FOUND A PERFECT ACRE AND BOUGHT IT 2 YEARS AGO. WE HAD A WELL DRILLED
IN A STRAIGHT LINE BETWEEN MY NEIGHBORS 2 WELLS ABOUT 300 FEET APART. THESE
WELLS ARE ABOUT 140 DEEP. I HAD TO GO THROUGH GROUND FOR MY WELL 280 FEET DEEP.
TO HIT WATER. ALL I NEEDED WAS ENOUGH WATER TO BRUSH MY TEETH AND TAKE A SHOWER. I
FEED FOR THE RANCHES AND THE WATER RISES LOW. MY WELL WAS ESTIMATED AT 11,000. - IT COST
29,000. - WHEN I WAS DONE,

MY VIEW IS THRU THE GAP FROM RD 197. I'LL LOOK AT YOUR TOWNS
IF YOUR LINE GOES THRU #2. I'VE WAITED 20 YEARS FOR THIS ACRE TO BUILD ON.
IM 57 GETTING UP FOR RETIREMENT (MY LAST STOP). THE AINLEY RANCH IS ACROSS
THE STREET FROM ME. I WAS CAREFUL TO PICK PROPERTY THEY WOULDN'T BREAK UP
IN MY LIFE TIME. THEY SAID THEY WOULDN'T BREAK UP PROPERTY SO I WOULD KEEP MY VIEW.
NOW EDISON'S TOWNS ARE READY TO KILL MY VIEW! I'VE LIVED IN WOODLAKE AND
WANT TO LIVE IN ELDERWOOD. IM WILLING TO PAY FOR GAS AS MY JOBS ARE MAINLY IN
VISALIA. THE VIEW AND SOLITUDE ARE BEAUTIFUL IN ELDERWOOD AND YOUR TOWNS
MOVE MY PROPERTY WORTH NOTHING. CORREWAY I TAKE WALKS & BIKE RIDES AROUND
EXISTING RANCHES BETWEEN ELDERWOOD AND WOODLAKE. YOU WILL KILL THAT!
I PAY WITH GAS AND TIME TO LIVE OUT OF VISALIA. PLEASE ROUTE 3A!

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

- Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Mr. Jensen Uchida SJXVL Project (08-05-039)
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, CA 94104-4207

Dear Mr. Uchida:

I applaud your planning and design acumen in the recommendation of the utilization of the existing right-of-way for the Cross-Valley Loop. This concept reduces EMF exposure to nearby residents of the existing line by more than 80%, provides APLIC*-approved lines that are more friendly to all avian species, especially large raptors, and places the perceived burden on those who reap the greatest benefit from the line. The major shortcoming is that it does not extend farther to the north, to areas void of habitation and cultivation, thus fully exploiting the existing right-of-way through the valley floor. What assurances do we have from Southern California Edison Corporation that the existing lines, as they approach their 100 year anniversary, are compatible with the environment which has grown up around them? Quite bluntly, are they safe? Perhaps this is an investigation germane to the environmental process, as should deficiencies be discovered, those facts would have a bearing on the decision making process. In light of the fact that the Rector-North right-of-way will need rebuilding at some point in the future, arguments against its utilization fall largely on barren ground. The need for integrating this corridor into the City of Visalia's urban fabric should be given much consideration, and given the city's testimony concerning its wishes to improve recreation and housing pattern planning, it would seem that the sooner these lines and their right-of-way could be improved/resolved, the better.

Countless hours of local collaboration and fact-finding have been devoted to arriving at a solution to this problem that is practical, equitable and that will withstand the immutable judgement of time. You have heard much about a locally developed work-around which avoids the impediments outlined in the Draft EIR for Route 3. This Route 3A plan, with its improvements, is consistent with common sense, State policy, and the principals of good design and conservation. Cost criteria design is a false bargain. The alternatives (other than 3 or 3A), only provide us with low initial cost, and make no mention of the bills that will have to be paid in the future: bills of mediocrity, bills of divided communities, and bills of damaged farms, neighborhoods, and vistas. The bills for poor design will keep on coming and never be paid in full.

* Avian Power Line Interaction Committee

65-1

166-1

Not included in your Draft EIR is a Green House Gas analysis for the City of Farmersville. Farmersville is what is called in popular parlance, a "Food Desert", a community without a major food retailer that would offer the competitive prices that many of us take for granted. Should the proposed project frustrate the community's ability to attract a full service food vendor by dividing and rendering undesirable the last convenient parcel of retail land, the concomitant GHG savings would also be frustrated. These savings are measurable and considerable. This community of 10,000 may conservatively generate 2000 trips per week to nearby markets to acquire food at competitive prices. The closest such markets are 2 miles away, at an optimistic 20 mpg. Thus, 2000 x 52 (wks/yr.) X 4 (miles/round trip) all divided by 20 (mpg.) and multiplied by 20 (lbs.of carbon dioxide/gallon of gasoline burned), and we arrive at 416,000 lbs. CO₂ or 208 tons of CO₂ or about 56 tons of pure carbon every year. To be sure, the Supermarket's GHG production is not calculated, but attrition, market efficiencies and forces, and organic growth should cancel much.

I66-2

The concept of cumulative negatives has received much attention. I would like to posit there are cumulative positives created by route 3A. Rather than being a solution full of worse and less worse decisions, 3A actually visits benefits on many, has a supportive constituency of its own, and avoids a "death of one thousand cuts" solution that has been so common to our county and state.

I66-3

Finally, there is a matter of some errata or inconsistencies in the Draft EIR. The Draft is in error in that it states that no daycare facility exists within ¼ mile of the Proposed Project. In at least one instance, a state-licensed one exists, and has existed for some years at 2490 Filbert Street in Exeter, approximately 500 feet from the centerline of Proposed Route 1. The Draft also fails to carefully delineate the routes and elevations of the myriad gravity-delivery agricultural water systems of the area, while simultaneously requiring 3 feet of cover over all utilities under the right-of-way. This may not be feasible with gravity-delivery systems. Additionally, in the Draft description of the land use planning policies, it states that no homes in Lemon Cove would be located to the south of the alignment. In fact, there are more than a dozen homes to the south and southeast of Proposed Route 1. I thank you for your continued diligence and scrutiny of this project.

I66-4

I66-5

I66-6

Sincerely,

William Pensar

From: Joe Sing [mailto:joesing@sbcglobal.net]
Sent: Wednesday, July 29, 2009 10:47 AM
To: San Joaquin Cross Valley Loop Project
Subject: SCE San Joaquin Cross Valley Loop Transmission Project

Mr. Jensen Uchida
 San Joaquin Cross Valley Loop Transmission Project
 c/o Environmental Science Associates
 225 Bush Street, Suite 1700
 San Francisco, CA 94104-4207
 Fax: (415) 896-0332
 E-mail: sjxvi@esassoc.com

I would like to be on the record that I am against the proposed transmission routes identified as: Route 1 and Alternative Routes 2,4,5 &6. In looking at the various routes I feel that Alternative route #3 would impact the existing and future property owners the least amount and makes use of the existing right of way. I feel confident that SCE engineers can overcome the environmental, cultural land stability issues identified with Alternative Route #3. These issues are and should be secondary to the impact on the people's lives and incomes that would be impacted by the other routes. Additionally the visual impact would be greatly changed by Route #1 or Alternative #2,4,5&6 whereas the visual impact to Alternative #3 would change little in the area of existing lines and little visual traffic where the new line would be installed.

I67-1

Joe Sing
533 W. Santa Rosa
Visalia CA (93292)
(559) 747-3458
joesing@sbcglobal.net

From: Nytc@aol.com [mailto:Nytc@aol.com]
Sent: Thursday, July 30, 2009 3:33 PM
To: San Joaquin Cross Valley Loop Project
Subject: Docket # A08-05-039 "San Joaquin Cross Valley Loop Transmission Project"

Docket # A08-05-039 "San Joaquin Cross Valley Loop Transmission Project"

Comments on the DEIR – July 30,2009
Tony Calcagno
273 High Sierra Drive
Exeter, CA 93221
559-592-0100

Thank you for all of your work on the DEIR and thank you for coming to Visalia on the 23rd to give us an opportunity to voice our opinions.

The purpose of my letter is to ask a number of questions, make comments and hopefully make this DEIR and future ones better. Please be patient with my views and comments. They may be long as my thinking is sometimes circular and complex.

I would like to talk about an easy section of the DEIR but being from NYC and having lived here only 5 years I have to question the aesthetic evaluation of the area. I have to respectfully disagree with your conclusion that all routes are the same. In fact I totally disagree and feel your conclusion and assumptions are totally in error and display faulty thinking and conclusions.

In the area of construction or farm land it's easy to evaluate the differences because there are numbers and comparisons to follow. **My question is when it comes to aesthesis do you have a matrix or formula or mathematical equation that you use? If not, why not.**

1. **How can adding an additional 17.4 miles of new power lines be esthetically the same as upgrading an existing ROW?** The old towers already exist. The impingement on sight already exist. So if you do not use the existing ROW and create a new 17.4 miles of power line, this fact of necessity has to be a negative. A new 17.4 miles will impinge on the landscape and aesthetics.

I would create a scale ie: Improving an existing ROW would be a +80 points for aesthetics. Creating a new 17.4 miles of power lines would be a -80 points against good aesthetics. **How can adding 17.4 miles not be considered as a negative?**

2. Route #1 would have 9.2 miles along hwy 198. Your report 4.1-18 says that 30,000 cars per day travel hwy 198 east of Lovers Lane. 30,000 cars per day X,s 365 days in the year = 10,950,000 cars a year. Let me spell it out for effect, **an**

extra10 million, 950 thousand extra cars will be seeing the New power lines along route #1 each year. Each car will travel approximately 10 minutes along this stretch of road so multiply this factor in also.

How can an extra 10,950,000 cars seeing power lines for 10 minutes each not be considered a negative or less aesthetic?

3. Route #1 has 2 extra crossings of hwy 198. One in Exeter about 15 mile further East and closer to the Sierra Mountains and the other in Lemon Cove about 20 miles further East and closer to the mountains and National Parks. Two points here. The increased number of cars passing these two points has to be calculated into the equation. **How can 2 extra crossings of hwy 198 not be considered a negative?**

Also the closer you get to the foothills, the more beautiful the area becomes as evidenced by the process of making the eastern part of hwy designated as a Scenic Hwy. I would score these as a -15 aesthetically for the Exeter crossing and -20 for the Lemon Cove crossing to correspond to the number of miles closer to the mountains.

4. **A power line going through a small city like Farmersville has to have a larger percentage impact on its population.** I would say that 70% of the people will see and be negatively affected. Because of the much smaller number of square miles the city occupies, you literally will not be able to escape from the power lines. This would make it a -70 on my aesthetic scale. A smaller area, like a pebble being thrown into a small pond, will of necessity feel the biggest effects as the same pebble being thrown into a larger pond that's 12 times larger.

Visalia has 125,000 people in it. The number of square miles is much, much greater and the power lines are on the Eastern most point of the city of Visalia. I would give this a -20 on the aesthetics scale because at most it may effect 20% of the towns total population..

5. **The DEIR has NO chart showing on ONE page a graph of the height of the existing poles in the area in comparison to the new poles and towers being proposed.** A telephone pole is 40 feet, the height of the existing wood power lines some 60 and others 90 and the new proposed poles of 120 and 160 feet. If this DEIR is a public education document, the public should be graphically informed. Again here, I'd have to give the higher pole a higher negative on the aesthetic scale. I made my own chart which was one inch = ten feet and the scale of difference was drastic. These new poles are 3 and 4 times higher then most existing poles. They are actually monstrous in size in comparison to what currently exists in out area.

Most of the Local residents have no understanding nor comprehend the extreme height of these new poles and it should be clarified in one comparison size chart.



I68-1 cont.



I68-1

I68-2

6. Are the “simulation” pictures in 4.1-3b etc based on a true mathematical scale and equation. **Have you verified that the scale of pole feet in each picture representation is accurately represented?** They appear to be fictitious, false and completely inaccurate. I would like to have an outside verification that we are not being misled. The new poles look exactly the same as the existing poles when they are double the size.

I68-3

I saw no pole simulation pictures by existing community developments. If you are to be giving accurate representation on aesthetics why is there NO full community impacts pictures shown. Badger Hill is probably the only Community of 80+ homes that will be looking directly at a tower and poles or looking down at the tower and poles. There is No representation or simulation of this. Badger Hill is one of the most upscale communities of Tulare County, I would guess a \$100,000,000 million dollar complex and it has been totally neglected in the calculations.

I68-4

My home sits at the 1,000 foot elevation level. Many homes are lower and much closer to the power lines

7. Route #1 would cut through 17.4 miles of mostly new ROW. Let’s say 15 miles of this new ROW is farm land. Our farm land here consists mostly of orange, peach, plum or walnut trees. **How can removing 15 miles of trees because it’s a new ROW not be considered more of an aesthetic negative?**

My impression of your conclusion in regard to Aesthetics, table 5-2 where you say that as far as esthetics go, **“there is no preference”** on any route proves, that your conclusion that **“all routes are created equally”** to me proves that the decision was not based on any logical calculations, reasoning or plain common sense.

What I hear as your reasoning is, “There are poles already in the area and the vista is large, so more pole won’t matter.” Your conclusion is based on an assumption and is truly faulty thinking.

I68-5

If the addition of these new poles does not matter, do you know the saturation point or have a formula of when they will matter. If you were a photographer and tried to take a picture of the scenery without any power or telephone line in the picture you would have a different view.

The famed architect, Frank Lloyd Wright, fought against a power line project in Arizona. His point of view was that all power lines should be buried because they represented a serious blight to the landscape, beauty and aesthetics of the area. So it seems we have 2 totally contrasting points of view from no poles to adding more poles is just fine.

Both conclusions are subjective.

Evolution of thought is needed here. Once NYC (1900’s) had an excess of wires above it’s city streets until a major snow storm caused them all to come crashing down. They were then wisely put underground.

Once most major East coast manufacturing cities were dotted and filled with coal burning power plants. Then we learned about the health hazards’ and pollution. We evolved into cleaner energy producing power plants.

A formula, matrix or scale of some kind is needed. We must evolve in this discussion on aesthesis. Your DEIR had no numerical listing of the number of complaints on aesthetics voiced before you in the November public hearing or in the written protest. When the Administrative Law Judge, the Honorable Hallie Yacknin was here, many voiced their opposition to route 1 over aesthetics. Maybe this gets registered in another section of the trial.

I am asking you to please reconsider your conclusion that there is no preference aesthetically on any route. Common sense would have to dictate that using an existing ROW vs creating a new 17.4 mile ROW would be detrimental to the aesthetics of the area. **I think you would have to, at the very least, declare that route #1 has a SLIGHTLY more negative effect on aesthetics as compared to the other routes.**

Using more of an existing ROW conforms and meets the Garamendi Principles in SB2431.

Thank you for your time and consideration. Please listen to the people in this area. Route #1 along a scenic highway which leads to the foothills and National Parks and crosses hwy 198 in two additional spots is essentially a negative on aesthetics as compared to using the existing ROW.

So I think you made a correct decision in your analysis in preferring another route besides route #1 but I essentially believe the condemnation against route #1 should be even stronger by claiming it has a more negative effect on the aesthetics then the other route.

Kind Regards,
 Tony Calcagno
 273 High Sierra Drive
 Exeter, CA 93221
 559-592-0100

I68-5 cont.

Comment Letter I69

California Public Utility Commissioner
Docket Number A.08-05-039

NAY

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Ste 1700
San Francisco, CA 94104-4207

My name is Diane Heaton, my husband and I have lived in our home for 35 years, which is located at 3014 N. Filbert, Exeter, CA., 93221.

I am against the proposed project (Route 1) San Joaquin Cross Valley Loop line project. I have attended alot of meeting over the last few years. The first was SCE meeting in Farmersville, in Nov. of 2006. At that time, I was told by two different representatives that they were not really sure about the health effects from the proposed line, our home is approx. 600 ft away from the proposed site. I am assuming things have changed since now I am being advised that the project is "safe" in every way and will increase "reliable" electric service. I was also informed at that meeting that SCE was not really sure about the static electricity effect on our home (such as T.V. and cordless phones). I support Route 3 A, it will have the least impact on agricultural resources. Tulare County is the second leading producer of agricultural in the United States. Route 3 A appears to fulfill the electrical system goals and minimizes the impacts on agricultural resources. I would appreciate a paper copy of the Final EIR. Thank you,

169-1

Diane Heaton

Diane Heaton

Comment Letter I70

California Public Utility Commissioner
Docket Number A. 08-05-039

NAY

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/o Environmental Science Associates
225 Bush Street, Ste 1700
San Francisco, Ca 94104-4207

My name is Joel Heaton, I live at 3014 No. Filbert, Exeter, Ca.

I would like to start out by saying that Southern California Edison submitted a proposal for a loop line with the comment that there was no opposition. Needless to say, several years later, several meetings later and several hundred opponents later, the proposed line hasn't started to be built. It's a said case, when SCE proposes to break the backs of local farmers so that the City of Visalia (at their own desire) can continue to grow which in turn needs to secure future utilities for their city. Maybe it would be wise for the City of Visalia Planning and the local Utility Companies to all set down and do a better job in their planned growth mapping. Taking out valuable farm land is not the answer. Let them go back to the drawing boards and lay out pathways for future utilities, if they need to go above ground; that will give SCE the time they need to upgrade the existing 100 year old transmission line that is in need for repair, if not total replacement. Talk about existing towers that should be replaced by taller more efficient towers and lines (per words from SCE).

170-1

I'm totally against the proposed action, until a realist plan is submitted. Let SCE put some money back into the infrastructure they currently have in the lines heading north from the Rector station, and then let's see what the actual costs would be to hook up a "LOOP" line.

Don't put the burden on the farmers; don't let SCE do to them like the smelt did to the water allocations to the West side of the valley.

Don't believe everything you hear about the vernal pools and how that area has been given to the Ecological Reserve. That just happened in the last 20 years and SCE has had transmissions lines out in the area for 80 years, and it seems that everything has survived so far.

Maybe if SCE planned just a little bit better, those sensitive plant species wouldn't be harmed. I can't perceive that SCE would inspect their lines that often that would have to run over a popcorn flower...

Don't let Farmersville go through careful study and planning of their commercial area, but to be ruined by the Loop line.

Comment Letter I70

Comment Letter I71

If you feel the need to pass a Route, due to pressures from a large Utility Company, consider Route 3, just look at the aerial maps. it will save trees, jobs and lives. Trees do more than just carry a crop, they help clean the valley air, they give thousands a job, they support thousands of linking services and they feed the world, that's more than transmission lines can offer.

Joel Heaton

↑
I70-1

From: Dale Kersten [mailto:djkersten@comcast.net]
Sent: Thursday, July 30, 2009 7:46 PM
To: San Joaquin Cross Valley Loop Project
Subject: San Joaquin Cross-Valley Loop Project

TO Jenson Uchida
FR Dale Kersten
2131 N. Clark Ct.
Visalia, CA 93292

The weakest link of the proposed power line path of Route 1 is the area where the power lines would cross over Highway 198 then make a westward turn below Badger Hill towards Northern Exeter and Northern Farmersville. This would destroy a major scenic vista along the Highway 198 corridor. People who live up on Badger Hill and those who live or travel below would have their scenic views destroyed. Too many people would be impacted from this option and in my view is an unacceptable option. It is the worse place in any scenario to place a power line and much worse for a power line to make a 90 degree turn. No price tag can be put on this option with regards to cost savings. A \$39 million to \$67 million dollar savings is meaningless. Destruction of a scenic vista of this magnitude cannot be measured in dollars. Route 1 is not an acceptable option.

I71-1

Sincerely, Dale Kersten

TOTAL P.03

Written comments on the DEIR for
SCE's San Joaquin Cross Valley Loop Project, A0805093
July 30, 2009

Trudy Wischemann
P.O. Box 1374
Lindsay, CA 93247
(559) 562-9095

Dear Mr. Uchida,

I live in Lindsay and consider myself a resident of the Tulare Lake Basin. I have a BS in Conservation of Natural Resources and an all-but-thesis Masters in Environmental Planning from UC Berkeley. I am a writer and researcher on farm structure, land tenure, and rural community development as well as local history. I actively advocate for rural life in this county. I have a weekly column called "HomePages" in the *Foothills Sun/Gazette* where I pursue those subjects in print.

Last September I presented comments on this project at the scoping session in Farmersville where I spoke to two large concerns. The first was the visual impact of Route 1, what is now being called the Proposed Project route. The second was the potential loss of farms and farmland, not only from the construction of the project but from the growth-inducing aspects particularly of Route 1, which appears inordinately convenient for the construction of the J.G. Boswell corporation's proposed Yokohl Ranch development.¹ That development will not only convert Yokohl Valley from rural to urban, redirect agricultural water rights to urban uses, and dewater the canal-lined farmlands below Terminous Dam, but will also trigger the development of those downstream farms into subdivisions and strip malls. In my comments I also suggested that the No Project Alternative be given real consideration.

The Draft EIR does not address any of my concerns.

1. Visual Resources.

The finding of no significant impact of Route 1 on the visual resources of this small, intimate region, which are minimized under the heading of "aesthetics," simply means that you don't know what you're looking at. The Kaweah is the only river in the San Joaquin Valley where you can look right up into its headwaters as you drive toward it, and see where all the water and soil has come from. This fertile basin was the most densely populated region in North America before the arrival of Columbus. It was the first area of the entire San Joaquin Valley to be settled by white folks because the Kaweah is a distributary stream and it was easy to dig the canals and bring water from the Four Creeks to many non-riparian acres. (See

¹ Since that project has already been given two green lights by our county Board of Supervisors, I think it definitely should be considered in the evaluation of growth impacts, whether you are required to do so by CEQA or not.

William L. Preston's *Vanishing Landscapes: Land and Life in the Tulare Lake Basin*, U.C. Press, 1977 for the best developmental history of this area.)

Once past the Big Creek-Rector lines, the views we have from Highway 198 east of Visalia - views of farms and tree-lined canals and channels of the Kaweah, then looking up into that watershed and the Sierra - are precious to most of us who live in this region, not just those who live in the electrical needs area. They are also part of the tourists' experience as they drive to Kings Canyon and Sequoia National Parks. What we all see, particularly from the two overcrossings, are views of a pastoral ecology that includes modern humans, as well as a sense of what the early explorers and settlers might have seen when it was pristine. By and large, it is still a landscape free of the urban/industrial presence these transmission lines represent. Perhaps those overpass views are only a minute or two in length, but those are precious minutes that many of us look forward to on our commutes to the city of Visalia. They provide perspective on a real alternative to the industrialized farming regions to the west, perspective that is enormously needed in this region .

The term "visual resources" goes far beyond mere aesthetics. It includes things that are historically and culturally meaningful, as well as those things that teach us what it means to be human. This landscape isn't just aesthetically pleasing: it is eye food for the soul.

And it was to the earliest explorers, as well as the first settlers, who noted its natural abundance with relish and sometimes passionate vision. For instance, read these words of James H. Carson, a cousin of Kit Carson's, a few days after his arrival in the Four Creeks region:

"(The Kaweah) can be heard when you have gone a few miles in among the Buttes at its entrance on the plain, thundering from the rocky heights of the sun-capped Nevada. Its waters, as if tired of their task, seem to stop to rest in a beautiful small lake, formed amongst the conical hills.

These hills divide the waters (of the Kaweah) at the foot of the Lake into the four streams known to the traveler on the plains as the Four Creeks. These Creeks meander thro' a heavily timbered and beautiful country, some 25 miles, where they empty their waters into the (Tulare) Lake.

Allow me here to digress for a few moments from the tenor of these sketches, and you who admire the beauties of nature, untouched by the hands of man, accompany me to the top of the conical hill that raises its head near the mountain - far above the rest that surround it - and there view the fancy pencilings of the finger of the unseen Hand that formed from chaos this, the most lovely spot in California. Now from its top we see around us a hundred conical hills rising from the plain, smooth and diagrametically shaped, as if done by the chisel of the artist. Here, too, the Sierra Nevada rises abruptly from the plains - its wall-like rugged sides running almost perpendicularly up, until its spiral peaks are capped with the eternal snows that shine with dazzling brightness from the rays of the rising sun....Here, on the green plain, from where the Buttes rise, can be seen here and there the broad, low-spreading branches of the evergreen oak. The stillness of nature around is only broken by the

I72-1

I72-1 cont.

thunder of the waters of (Kaweah) River as they come through the rocky gorges of the mountain passes; but, here at our feet, their white foam has died away, and in this crystal lake, where fish of a thousand species sport, they seem to stop and rest before they hurry on to their destination. Now, let us turn and look westward. The oaks, in their majesty, thickly cover the plain for miles around, and stretch away to the shore of the Tulare Lake. Amongst them and through high green grass, meander the Four Creeks. To the right, at the distance of 25 miles, runs the belt of timber, marking the course of Kings River to the lake. On the left is seen, at the distance of 20 miles, the broad body of timber that marks the course of Tule River. The body of land, thus bounded, is the best in the valley - well timbered and watered, and covered with the finest grass in California. Stretching beyond this to the west lie the placid blue waters of the Tulare Lake, whose ripples wash the foot of the low hills of the coast range - the blue tops of which set a boundary to the scene." (From *Bright Gem of the Western Seas: California 1846-1852*, Great West Books 1991, pp. 59-60.)

I72-1
cont.

Carson was not the naturalist that John Woodhouse Audubon was, or the scientific observers that Fremont and Derby were, but he accurately interpreted the tremendous value of this unique place. Please note the photocopy of a drawing of the exact place Carson is standing when he wrote the above description: with the exception of the dam and the small farms on that land, it doesn't look much different now.² It is possible to imagine what Carson saw then while looking at the current landscape now.

The DEIR indicates that there is no significant impact of Route 1 in terms of aesthetics, but that finding is simply wrong. The imposition of this highly industrialized - and highly corporate - form across this scrap of what's left of that rural landscape, a pastoral ecology where humans and other beings still coexist in some kind of productive harmony - would be a desecration, the loss of a landscape that is sacred to many of us who live here and much admired by those who come to see the grandeur of the peaks behind it. The finding of insignificance on Route 1 is one made in ignorance of our history, our community values and the meaning of the term "visual resources."

² From Wallace Smith's *Garden of the Sun: A History of the San Joaquin Valley, 1772-1939*, Second Edition, Edited and Revised by William B. Secrest, Jr., Linden Publishing, Fresno, CA 2004, p. 53.



I72-1
cont.

The "Four Creeks" area of Tulare County, home to many Yokuts tribes, in its pristine state and as recorded by the Pacific Railroad Survey in the 1850s. *Pacific Railroad Surveys*, volume V.

From Wallace Smith's *Garden of the Sun: A History of the San Joaquin Valley, 1772-1939*, Second Edition, Edited and Revised by William B. Secrest, Jr., Linden Publishing, Fresno, CA 2004, p. 53. The hills in the foreground are the Venice Hills.

2. Agricultural Resources.

When it comes to agricultural resources, the DEIR also minimizes my concerns by reducing farms and agricultural viability to the mere calculation of acres of farm land that would be lost under the four scenarios. The Proposed Project (Route 1) is more costly in even this measure than the others, but the numbers suggest that anybody worrying about 2.9 acres of this and 13.0 acres of that, is picking at straws.

The real potential impact to "agricultural resources" will come from what it does to the farms and the farm people: whether the right of way splits their parcels in difficult ways, whether the line reduces their property values and thus their ability to get production loans, dries up a well at an inopportune time, or impinges in other ways on their ability to farm efficiently. But those things aren't considered in the agricultural resources section. A few, however, are found in other sections.

For instance, the hazards to crop dusters are listed under Hazards and Hazardous Materials. The DEIR notes that nationwide over the first 11 months of 2008, 63% of all cropdusting crashes were a direct result of having struck a power line or pole. After noting that some of the biggest dangers occur with new rights-of-way and the creation of right angles, the DEIR states that "the Proposed Project (Route 1) would represent a potentially significant hazard to aerial sprayers because it would create a right angle to the existing Big Creek-Rector transmission lines within an agricultural use, and it would result in approximately 15.5 miles of new 120- to 160-foot poles/towers and conductors within or immediately adjacent to existing agricultural fields, orchards and vineyards where no such structures currently exist." Unbelievably, the report then decides this danger is mitigable simply by informing all the local pilots of the location of the new lines.

Obviously whoever wrote this section does not live in an agricultural area. Crop dusters don't bite the dirt because they don't know where the lines are: they die because they miss, they have an accident. My small community of Lindsay has lost 2 pilots to power lines in the last 20 years, and their stories have not been forgotten. But the DEIR does not calculate the potential cost in lives to this deadlier route, much less the cost to farmers of this increasingly difficult way of getting one's crops sprayed.

The same problem is true with the potential impact on farmers' wells. What little evaluation was done is to be found in the Hydrology and Water Quality section, where the possibility of temporary dewatering and possible groundwater contamination was considered, but found insignificant, while the impact of those insignificances on the farms and farms families was not evaluated at all.

There is no cumulative impact on agriculture evaluated using even the few shards of potential impacts identified in other sections. The DEIR is significantly inadequate in terms of evaluating impacts on agricultural resources.

I72-2

I72-3

I72-4

3. No Project Alternative.

My third complaint is that the No Project alternative has not been evaluated seriously. In every paragraph where it is discussed, the authors simply say there would be no impact because there would be no project. As of this writing, we do not have even the smallest idea what the costs might be of the no project alternative, or the potential benefits. On page ES-11, **Class IV: Beneficial impacts** are listed, but not one shows up in this document. If Edison isn't allowed to build this project, perhaps land developers won't risk their capital to build subdivisions because of the uncertain supply of electricity. That could be a beneficial impact.

I72-5

The finding that this project will not induce growth is a joke, especially Route 1. The dismissal of Alternative Route 4 from consideration, which according to one county supervisor was received as an affront by representatives of the Boswell corporation when they saw that line on the map, only adds credence to local perceptions that Route 1 is preferred because it will make it much easier to sell electricity to the 40,000 new residents of Boswell's planned city called Yokohl Ranch. It is disingenuous to claim otherwise.

I72-6

C. Conclusion: What this Draft EIR has done is dis-integrated our environment into shreds called "major issue area categories," which is opposite the original intention of an EIR. It's like what happens when you start to unravel a rope. Imagine that we are this piece of rope, which has strength when all the strands are wound together. But when you start to unravel it, you can say "Look here, this strand is weak, I can break that, it has no importance - and the same goes for that one, and that one...." Those threads *are not* the rope, you *can* unravel it - but then you don't have a rope.

As I said last September, I cannot stress enough the importance of keeping the land between Visalia and Terminous Dam in its current state of development as rural farm land for the way it constantly reminds us who and where we are, and what we have: the incredible productivity of this land and water and the hands that work it. This land, that water, and those hands are God's Providence, His way of caring for us. As a people I think we are desperately in need of learning that, and this is the place where it still could happen. But not if you make it easy for Boswell, and harder for the little guys who are still trying, and are actually *able* to make it on 40 acres or 160 of this incredibly fertile, well-watered land.

Please review your determinations of insignificance of impacts on visual resources and agricultural resources by giving them deeper, more thorough examination. Please also expand and amplify the No Project alternative. Look also at the differences in parcel size and ownership between Routes 1 and 3. You'll see that far fewer *farmers* are impacted by Route 3 than Route 1, with no corners for those cropdusters to get caught on. Those cropdusters' wives will thank you, as will I.

Yours sincerely,

Trudy Wischemann

Public Comment Card Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Suzanne Bidwell Date/Fecha: JULY 30, 2009
Address/Dirección: PO Box 427 Woodlark CA 932810
18044 AVE. 376 - VISALIA, CA 93292

Comment/Comentario:

July 29, 2009

To Whom It May Concern:

My name is Suzanne Bidwell. My home and property is located on Ave 376, directly across from the proposed site of Alternate #2. My home is situated 80 feet above the road, and my patio opens directly south into the proposed location of the large trellis of the tower, where the lines come through "Mud Gap" and head south along the Friant Kern canal. I cannot stress how distressing it is to me that my view will forever be ruined. I did not spend the money and time to build a beautiful home with a view to have it destroyed. It's not like I have the extra money to try and sell and relocate. I am retired and live on a fixed income. My property will lose value because of the location of the power lines and the massive trellis structure that will be placed on the corner. I've lived in this area my whole life along with my daughter's family (The Rose's) who lives across the street. Please consider Alternate #3, because it works with the existing lines already in place, and will not destroy our beautiful countryside and farming community. I pray that you will put yourself and family in my position. Thank you for consideration in this route.

Sincerely,

Suzanne Bidwell
Suzanne Bidwell

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Public Comment Card Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Lorene Clark Date/Fecha: July 31, 2009
Address/Dirección: 17770 Ave. 288, Exeter CA 93221

Comment/Comentario: I attended several of the public comment meetings in regards to the proposed project, and have reviewed the Draft EIR. Added to my own opinions in regards to the various routes offered as alternatives, it would seem to me that the most common sense route to choose would be Route 3, or a slight modification of that route to avoid any adverse effects on the normal pools. Whenever such a project is deemed necessary it is almost a given that some adverse impact will occur, but every effort should be made to keep such to the lowest level possible. All things considered, the best balance for the least negative impact of this project is Route 3 or the above mentioned modification of that, and so I urge that this be the route chosen as the final selection.

Thank you for considering my comments.
Sincerely,
Lorene Clark

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

To: Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street
San Francisco, CA 96104-4207

Southern California Edison's San Joaquin Cross Valley Loop Transmission Project
CPUC A.08-05-039
SCH #: 2009091090

From: James M. Gorden, P.O. Box 44066, Lemoncove, CA 93244.
559/597-2373
jim@gordenag.com
July 30, 2009

I grow citrus and olives adjacent to the Applicant's desired route and also within the Big Creek-Rector right-of-way, West of Ivanhoe. As an agriculturalist, I would like to speak briefly to the Ag. Resources section of the DEIR, and as a homeowner to the community values and aesthetics.

DEIR General Comments:

The DEIR assumes that impacts to the agricultural infrastructure except permanent conversion of farmland and Williamson Act contracts can be mitigated, 4.2-3 (4.2-14). The DEIR also assumes that orange and other citrus trees under transmission lines would not be adversely affected (4.2-4). The DEIR deals rather casually and imperfectly with these impacts, 4.2.2 (4.2-9 -4.2-14). The impacts of the proposed project on Alternatives 1, 2 and 6 using real conditions on the ground represent substantial negative physical and economic effects.

The DEIR did not adequately evaluate the significant irreversible changes to the irrigation system's infrastructure on Alt 1, 2 and 6. Water transportation systems not only supply water for irrigation, but are also necessary for frost protection. The evaluation was deeply flawed because the hydrology of the area and the built water infrastructure were not addressed. For example, the DEIR assumed that wells within the new right-of-way could be replaced. Water sources cannot be moved casually and in some cases the destruction of a well may not be able to be mitigated.

I75-1

1. Number of acres involved was under estimated, Table 4.2-4 (4.2-11) – Table 4.2-11 (4.2-24).
 - a. Farm equipment for pruning, weed and pest control must be restricted in the right of way, making it unsafe for farm workers. Harvesting equipment, such as picking ladders in the right of way is another example of unsafe working conditions.
 - b. Equipment to repair and maintain irrigation systems cannot be used under or immediately next to the SCE right of way due to unsafe working conditions.
 - c. Destruction of wagon wheel wells affects many acres, not just the acreage under the right of way.
2. Small parcels that lose acreage due to the right of way, may no longer be economically viable. Implementation of Mitigation Measure 4.2-5 (4.2-16) is inadequate in real life practice.
 - a. Farming is less efficient, due to percentage of land taken out of production.
 - b. Reconfiguring the irrigation system needs to be evaluated as to its possibility, and effect on the agricultural resource.
3. Built and growing agricultural infrastructure:
 - a. Expense of rerouting the irrigation systems and digging new wells was not considered.
 - b. Historic wagon wheel wells cannot be replaced today because of OSHA requirements.
 - c. Due to hydrology in the foothills, there is no guarantee any replaced well will have water or be equal to the well being replaced.
 - d. The mechanism for replacing wells and rerouting irrigation systems is not only inadequate, it is impractical. See Mitigation Measure 4.2-5 (4.2-16). Edison's cost to replace wells and vital parts of the system were not considered.
 - e. Much of the built water system is historic. Though not part of a historic district, facilities of the Lemon Cove Ditch Company, Wallace Ranch Water Company, Rocky Hill Ditch, Exeter Irrigation District, and Stone Corral Irrigation District may be impacted in varying degrees by alternatives 1, 2, and 6. Most of these facilities have been in place for more than fifty-five years, and some are more than one hundred years old. Impacts to these facilities, some of which are buried, and out of sight, should be considered.
 - f. Neglected to analyze need to upgrade the historic Big Creek Rector line and the cost saved over time, as well as safety issues.
4. Community Values - Aesthetics:
 - a. The DEIR takes a very biased view when describing resources that are valued by the local communities and people living in the area potentially affected by Alt. 1, 2, and 6. DEIR description of Hwy. 198/65 intersection is "The visual quality from these

I75-2

I75-3

I75-4

I75-5

viewsheds is considered indistinctive due to the industrial nature of the foreground views as well as the lack of natural or cultural resources that are typical of this region” (4.1-10). The industrial nature of the view is primarily due to the Venida substation, an SCE installation.

↑
I75-5
cont.

b. Highway 198 from Visalia to Lemon Cove provides the most dramatic views of the Sierra Nevada Range from the valley floor to the crest of the Sierra, available on a State Highway approach anywhere on the West slope of the Sierra. The Kaweah River Valley provides the most abrupt transition from Valley to peaks anywhere on the 400 mile extent of the West side of the range making the views on the clearest days, of snow-capped peaks, with a foreground of fruit laden orange trees, truly spectacular. If it is not considered a State or National treasure it is considered a treasure by those of us who live nearby. The 120-160 foot towers will be extremely unsightly as they will be visible from a significant distance due to their height. In addition, the preferred route of the applicant requires two new crossings of this State Highway at points with spectacular view sheds to the East.

I75-6

c. The tabular viewer sensitivity findings (4.1-2) indicate that alternates 2, 3, and 6 all cross SR 198 (these crossings would be via the existing right-of-way). The DEIR does not make it clear that Alt. 1 will require two new crossings, in addition to the existing right-of-way crossing which would remain intact. Two major new 220 KV crossings of this scenic corridor are extremely disruptive.

I75-7

Negative cumulative economic and social impacts:

1. Lost crop land results in loss of farm income.
2. Loss of farming and related jobs is a loss of a historic way of life and will impact our community values.
3. Loss of crop land has direct impact on citrus industry. Foothill citrus on Alt 1, 2, and 6 is part of the country’s largest producer of fresh citrus and a significant contributor to the local economy. Citrus land cannot be replaced or replicated.
4. Loss of view shed of the foothills and Sierra Nevada Mountains will impact our community values. We appreciate the view and are glad to live here. It is a part of who we are.
5. Only Alt. 1 requires two new SR 198 crossings, in addition to the existing right-of-way crossing which would remain intact. Two major new 220 KV crossings of this scenic corridor are extremely disruptive.

I75-8

I75-9

Incrementally cumulative impacts:

1. Number of acres to be destroyed was under estimated, Table 4.2-4 (4.2-11).
2. Growth-Inducing because small parcels no longer economically viable as farm land may be sold for housing or other commercial uses, 4.2.5 (4.2-16 – 4.2-17).
3. Did not evaluate status of land that would be taken out of Williamson Act.
4. The Big Creek Rector line is old and needs to be updated. We do not feel that the DEIR deals adequately with this factor. Following the same line will save money over time, will raise the height of the conductors, result in lower EMF levels on the ground and in general avoid most of the adverse impacts to agriculture, scenic values, and the local economy caused by the other alternatives..

I75-10

I75-11

Mitigation Measures to minimize impact:

1. Avoid impact.(preferred)
2. Set aside lost farming acreage (2 to 1).
3. SCE pay farmers for replacements of wells and irrigation systems.

I75-12

The conclusion is that Alternate 3, with mitigation or avoidance of the vernal pools near Seville, should be chosen because:

1. Affects fewer land owners.
2. Affects less farmland and agricultural infrastructure. The agricultural infrastructure has been built around the Big Creek Rector right-of-way for nearly one hundred years
3. Big Creek Rector line is old and needs to be updated. Re-cycling and upgrading the existing line will be cheaper to do now than later.
4. Updating the towers on the Big Creek Rector line will increase the safety for the workers who farm in or next to the right of way and those who maintain it.
5. Decreases the current footprint on the Big Creek Rector line because the proposed towers are stronger and wider apart.
6. Following the current Big Creek Rector line, Alt. 3, will lower costs over time because the total miles of right of a way that would need to be maintained is less than if an additional line (Alt 1, 2, or 6) were added.
7. Requires no new crossings of the scenic Highway 198 approach to the Sierra Nevada Range and Sequoia National Park.
8. Will result in lower long term adverse economic impacts on the local community than the alternatives.

I75-13

Docket Number A-08-06-039

I am James Gordon residing at 20151 Avenue 296 Exeter, California. I request the impact study for the Route One SCE 200kV transmission line from Lemon Cove to the Rector Substation include the following two issues.

1. The number of permanent jobs lost by the removal of fruit and nut trees, the cost to the public of providing income support and worker retraining.
2. The reduced number of out-of-area visitors to Exeter due to towers degrading the town's renown charm resulting in a decline of retail, service, and hospitality sales, negatively impacting commercial property values and sales tax revenues..

I would advise the consultants that permanent job losses caused by Route One are readily determined from administrative data. The University of California Cooperative Extension Service has recent publications detailing labor production costs per crop per acre. The numeric ratio of packer/shipper jobs to production jobs can be obtained from California Citrus Mutual for the number of jobs at packer/shippers, and compared against data compiled by EDD's Labor Market Information Division. Unfortunately, there are no surplus jobs in production agriculture in the region to which these workers can turn, Surface water curtailment and land subsidence causing stress on underground supplies have already fallowed or retired hundreds of thousands of acres and the loss of over ten thousand agricultural production jobs. Forecasts indicate that in least in the short term – 3-5 years there is little or no hope for a turnaround. However, Route One jobless workers are eligible for benefit and retraining programs. Their demographic description indicates they have on average 6 years of public school education, lack English language fluency, and lack job skills outside of agriculture. Public retraining costs per this type of worker range from \$2,500 to \$10,000 depending on current demand occupations. Major job training agencies use an estimate of \$5,500 per worker when applying for retraining funds. An argument that there will not necessarily be increased public costs as these workers will simply compete for existing slots with other workers may not have validity as there is ample history either of court orders or legislative appropriations to provide additional funding for permanent job loss when due to government action.

I was CEO of the nonprofit organization chosen by FEMA and the Governor's Office of Emergency Services to run the 1998-99 citrus freeze mitigation program. Until then such programs were handled by State or

I75-14

local government. The facts were that there was one field worker and one industry worker per affected acre (transportation, processing, and packing) who lost their jobs and were eligible for and received government assistance. The Draft EIR projects a loss of approximately 30 acres. Area growers testified the loss is likely ten times that. Once the acreage loss is determined multiple that by two workers x \$5,500 each worker for the cost to the government for training for jobs in demand in the local economy. This does not even considering costs to the unemployed worker, his or her family, and the communities in which they are integral to the local economy, plus the additional societal interventions often required when families disintegrate or fall on hard times due to lacking a job for family support.

On the second issue, the City of Exeter is a gem. One national magazine ranked it as one of America's 100 most desirable places to live. Another ranked it is one of California's top five places, and first among its small towns. Yet, another rated it as the "Prettiest Painted Town in the Southwest (ahead of Carmel and Taos). Its slogan is "Small Town Charm". Will the transmission towers marching along the Highway 198 scenic corridor leading to Exeter and under which one crosses to get to its commercial district have a negative impact on its retail sales? To find this answer the Exeter Chamber of Commerce surveyed its members by mail followed by in-depth interviews of those businesses not entirely dependent on the locals – boutiques, antique shops, cute restaurants, wine bars and the like. Findings included:

- No business owner believed they would lose customers due to the industrial feeling brought about by the towers.
- The majority estimated that between 30% and 50% of their customers were from out of the area many traveling 50-100 miles.
- These customers discovered these businesses only after deciding to visit Exeter because of its renowned charm wandering into the business, enjoying Exeter and regularly returning for visits, shopping and relaxation.
- The business owners estimated whether an industrial feel to the area caused by the transmission towers would reduce the number of customers who just wandered in because of Exeter's small town charm. The majority estimated a 25-50% decline in future customers.
- It is likely that a consultant could obtain information from communities who were similarly impacted to find out what actual reductions would result.
- The impact whatever it is would be felt only over a period of time. Obviously, if it reduced sales by more than 10% or up to 25% it would have a profound impact on retail, hospitality and service

I75-14 cont.

Page 3 Docket Number A-08-05-039

➤ businesses. Few exceed \$100,000 in gross sales, and negative growth would impact the number of business closures, commercial property vacancies, and a loss of "Small Town Charm".

↑
I75-14
cont.

Submitted on July 31, 2009 by: James Gordon, 20151 Avenue 296, Exeter, CA 93221, (559) 901-4926, cmonluke@aol.com

From: Mary Amanda Gorden [mailto:magorden@msn.com]
Sent: Friday, July 31, 2009 3:56 PM
To: San Joaquin Cross Valley Loop Project
Subject: CPUC A.08--05-039

To: Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street
San Francisco, CA 96104-4207
sjxvl@esassoc.com
Subject: CPUC A.08-05-039
SCH #: 2009091090
Date: July 31, 2009
From: Mary A. Gorden
P.O. Box 44066, Lemoncove, CA 93244
559/597-2373
magorden@msn.com

Gorden Ag has farmland affected by each route. I am a retired historian/archaeologist. I will speak to the value of cultural resources and community values of the people in the area affected by the proposed lines.

DEIR General Comments:

The DEIR inadequately addressed the significant prehistoric sites and historic infrastructure of the farm land, assuming that all cultural resources (4.5) can be mitigated to less than significant, and by doing so dismisses the prevailing Community Values of the Foothill communities. Community values are rooted in the prehistoric and historic past and are a component of a person's identity. The term, Community Values, implies rootedness, a home place which has deeply felt emotional attachments that are concurrent with kinship ties and friendships. At the two public SCE meetings held in Visalia, many of the comments reflected the community values that Sierran foothills residents hold. Native Americans expressed their attachment to the land and the concern that their burial and sacred sites be respected. The agricultural community has spoken out about their concerns. Community members formed P.A.C.E to give a united voice in opposition to SCE's proposed routes.

Landscape archaeology can be thought of as the face of a place. It encompasses the environment, as well as the people and their culture. In addition to the physical environment, landscape archaeology is concerned with the location in which people live their lives. Trees, rocks and buildings are viewed as meaningful things that are located ontologically and experientially in people's lives and social practices. Farming

communities, farm companies, irrigation districts, and multigenerational farm families are some components in the Tulare County foothills that define an archaeological landscape. Alternates 1, 2 and 6 have a built environment made up of outbuildings, such as barns and water towers, frost protection equipment, wells and irrigation systems. A number of these elements are historic.

Negative cumulative social impacts:

- 1. The junction of Hwy. 198 and 65 is an example of encroaching urbanization and industrialization. As noted by the DEIR, “The visual quality from these viewsheds is considered indistinctive due to the industrial nature of the foreground views as well as the lack of natural or cultural resources that are typical of this region” (4.1-10). The industrial nature of the view is primarily due to the Venida substation, an SCE installation. The proposed 120 - 160' foot towers will add to the “industrial nature of the view” as they traverse the landscape. This will result in a significantly cumulative impact.
- 2. The industrial towers will contribute to viewshed degradation. Loss of views of the foothills and Sierra Nevada Mountains impacts our community values. We appreciate the view. It is a part of who we are.
 - a. Alt. 1 requires two new SR 198 crossings, in addition to the existing right-of-way crossing. Two major new 220 KV crossings of this scenic corridor are extremely disruptive.
 - b. “Existing transmission lines, as well as other existing utility structures, are established features within the study area’s landscape setting” (4.1-2). What SCE fails to note is that the existing transmission lines, existing utility structures, homes, farm buildings or orchards are nowhere near as tall as the proposed 120-160' transmission towers that, will indeed, tower over the existing landscape.
- 3. Loss of farm land and farm related jobs impacts our historic way of life and, in turn, our community values. People’s testimony at the SCE meetings revealed that the encroaching transmission towers and electric lines threaten to degrade their way of life . These feelings are heightened by the language in the DEIR that trivializes our resources and states that almost every resource can be mitigated to a level of insignificance. Our rural land owners will give up their land and disrupt their lives so SCE can transmit power to the cities. The transmission lines benefit others, not us.
- 4. The following are some examples of the potential problems to prehistoric cultural resources.
 - a. CA-TUL-16 along Alt. 1 “may be within the alignment and could potentially be impacted by the Proposed Project” (4.5-14). Comparing DEIR Figure 2-3b with the site report US Geological Survey, Exeter Quadrangle 7.5 minute map and the site map included in the Site Survey Record for Tul-16, it is a high probability that the transmission lines transect the site and the position of the new tubular steel pole is slated to be built on the northeast portion of the site, which will cause considerable subsurface disturbance.
 - b. The line on Alt. 2 and 4, where they join, the DEIR states that “A greater portion of Alternate 2 runs through the more sensitive foothill areas than the Proposed Project. In addition, Alternative 2 runs through less developed land and therefore

I76-1

I76-2

I76-3

may contain a greater number of unrecorded archaeological resources.” I agree with these statements and would add that the area along Alt. 2 contains eight known sites. Three of which have village names, *Awnew*, *Wipanche*, and *Wuknow*. This area has special significance as the Yokuts creation place. Also included in named places along the SCE route is *Bawsu*, a spirit who lived in a certain hill (Latta 1977: 11-13, 184 and Gayton 1948:59). The DEIR is distressingly casual concerning the importance of these sites to the Native Americans and to the impact of their destruction on the community values that these sites embody. Foothill Yokuts have not been extensively studied, which makes the known sites more significant than might be otherwise.

I76-3 cont.

Incrementally cumulative impacts:

- 1. Transmission towers and electric lines are growth-inducing where they cross or parallel small parcels because this acreage is no longer economically viable as farm land and will be sold or converted into housing or other commercial uses, 4.2.5 (4.2-16 – 4.2-17).
- 2. Degradation of the viewshed, which has already been compromised by the transmission lines and facilities.

I76-4

Mitigation Measures to minimize impact:

Create the Agricultural Advisory Committee as proposed by the Tulare County Farm Bureau and the California Farm Bureau Federation to deal with mitigation issues.

I76-5

Alternate 3, with mitigation or avoidance of the vernal pools near Seville, should be chosen because it follows the existing rights-of-way, with the least impact to crops, farm infrastructure, historic and prehistoric cultural resources and community values.

I76-6

REFERENCES CITED

Gayton, Anna H. 1948. *Yokuts and Western Mono Ethnography*. University of California Publications in Anthropological Records, X., Berkeley.

Latta, Frank F. 1977. *Handbook of Yokuts Indians*. Santa Cruz: Bear State Books.

Courtney C. Hengst
37650 Millwood Drive
Woodlake, CA 93286
559-564-8134

Hayley F. Hengst
37650 Millwood Drive
Woodlake, CA 93286

July 31, 2009

Dear Mr. Uchita,

Dear Mr. Uchita:

Enclosed you will find a DVD copy of the Valley of the Sun Pageant. It is narrated by Blanche Maloy and her brother, Earl McKee. It depicts two events: a fundraising cattle drive (dated February 1926 and the actual "Valley of the Sun" pageant which took place May 1, 1926.

My name is Hayley Frye Hengst and I am 16 years old. My family and I are affected by the Cross Valley Loop, Alternate 2 & 6 choice for the power lines. I am the 6th generation to be living on Hengst Farms. I've lived in two homes in Elderwood, both surrounded by trees my grandfather planted. The house I live in was built by my great-great grandfather. Farming has influenced me my entire life. My dad has worked on the farm his whole life. He and my grandpa farm the land. You might say I have farming in my blood.

The fundraising cattle drive re-enacted the '49 Gold Rush cattle/wagon drives and it was held to raise funds for the ensuing "Valley of the Sun" pageant. It consisted of a large number of people in a "cattle/wagon train" drive from Three Rivers down to Woodlake.

My mom is a middle school teacher in Woodlake. At the beginning of the year, she explains to her students the three things most important in her life. One of these things happens to be a jar of dirt. This dirt is from Hengst Farms. She has grown to love the land since marrying into a farming family, and is so proud to keep the farming tradition going. It has occurred to me that the dirt my mom shows is the same dirt my great-great-grandfather tilled and worked in order to produce food for America and provide for his family. This is something I do NOT take for granted. Even though it may seem like SCE is only putting power lines through unimportant land, what is really happening is the destruction of any hopes my brother or I have of carrying on the farming way of life.

I77-1

I78-1

The "Valley of then Sun" pageant took place in the Sentinel Butte Valley (RIGHT where the Route #2 and 6 lines would go) on May 1, 1926. it was a reenactment of the history of that beautiful valley from the early Native Americans to the present day. It began with the Native Americans story of creation and continued through the early 20th century. Both Wilma and Harold Hengst (my husband Dave Hengst's paternal grandparents) were in it (as young people). Harold's father, Herold was also in it.

Please seriously consider Route #3, with the correct changes to avoid the vernal pools.

Thank you for considering this in the power line decision.

Thank you so much for your time,

Continuing the journey to preserve the past,

Hayley Frye Hengst

Courtney C. Hengst

John O. and Shirley B. Kirkpatrick
23114 Carson Avenue
Exeter, CA 93221

Comment Letter I79

Ph: 559-592-3422 - Fax: 559-592-5852 - E-mail: jkirkpatrick@onemain.com

July 31, 2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 941004

Re: **A.08-05-039 - Comments on Draft Environmental Impact Report**

Dear Mr. Uchida and the ESA Team:

We are pleased with the DEIR's recognition of, and understanding of, the importance of the scenic Highway 198 corridor and its ability to attract tourism and tourist dollars to Tulare County. We agree with your assessment that the environmentally superior route for Southern California Edison's new high voltage transmission line **is not SCE's Preferred Alternative 1!**

We do, however, take exception with your choice of Alternative 2 as the environmentally superior route, as we will point out in our comments on the DEIR that follow.

Background, History

But first, a little history lesson which may help you understand where we are coming from when we advocate for an altered Alternative 3 route as the environmentally preferred route that should be so designated when you write the Final Environmental Impact Report.

The Rector Line was constructed in 1913 from Big Creek, below Huntington Lake in the Sierra Nevada range, to Eagle Rock in Southern California, a distance of 241 miles.

The beauty of selecting PACE's revised Alternative 3 is that it will take advantage of an existing right of way and will provide Edison with the impetus to replace Rector's aging, substandard and sagging lines with taller poles and lines, resulting in a spectacular reduction in EMF, as described in the DEIR Chapt. 2.42 and illustrated by the graph in Figure 2-9.

For 95 years, the urban and agricultural development under and near the Rector line was done purposefully with the line in mind. Farmers who settled near and under it designed their farming infrastructure – wells, pumps, pipelines, filtration plants, drive roads, cropping patterns, etc. to accommodate, not compete with, the line.

On the other hand, Edison's proposed paths for Alternatives 1, 2 and 6 would introduce a new industrially-oriented concept through virgin territory. All of these routes have many unforeseen environmental impacts, which have not been discovered, identified or described in the DEIR, nor identified and acknowledged in SCE's cost studies and feasibility assessments.

The choice of Alternative 3 avoids the cumulative impacts of Edison's proposal. In reality, two projects – Rector's upgrade and the SJXV Loop – become one, thus avoiding the numerous and significant unavoidable impacts resulting from duplication of construction on two different rights of way.

I79-1

Kirkpatrick Comments – SJXVL DEIR
Page Two

Comment Letter I79

Garamendi Principles

The choice of Alternative 3 would also bring the project into compliance with adopted public policy of the State of California, referred to as The Garamendi Principles. These are referenced in Senate Bill 2431 (Stats. 1988, ch. 1457), regarding the role of transmission in California's future development. Briefly, the main points in this instance are:

1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
2. When construction of new transmission lines is required, encourage expansion of existing rights-of-way, when technically and economically feasible.

Alternative Comparisons - Biological Resources - Chapter 5.3, bottom of page 5-7
The DEIR states, "Impacts would be significant and unmitigable for Alternative 3. While Alternative 3 would result in the least impacts on agricultural resources, due to its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. The EIR team looked for a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological Reserve; however, (p.5-7) a bypass was not feasible due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the Reserve. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided through rerouting, Alternative 2 is the Environmentally Superior Alternative."

Designation of the Environmentally Superior Alternative (Alt 2 vs. Alt 3) hangs in the balance of this sentence!

John requested information from the CPUC regarding the specifics of the italicized statement. The reply was delivered by the Public Records Act (PRA) Unit of the Legal Division of the CPUC, file reference number PRA-0138. (Attachment A – Letter from John Kirkpatrick to Jensen Uchida email 6/27/09 and the 7/15/09 reply transmitted by the CPUC PRA Unit – a memorandum dated July 9, 2009 from Brian Pittman, CWB. The Pittman memorandum describes three alternative alignments around the Ecological Reserve that range far outside the Reserve boundaries resulting in transection of neighborhoods or a portion of the Reserve. Blue color fills arbitrarily delineated rectilinear areas, suggesting they are in their entirety identified as Designated Critical Habitat, or otherwise constrained from supporting High Voltage Transmission Lines.

The memorandum depicts and describes the three alignments as 3A, 3B and 3C (Pittman alignment 3A should not be confused with Consultant Hank Zaininger's PACE re-routing alignment 3A).

Questions contained in the request for information of 6/27/09 and our comments regarding the Pittman response are as follows:

Q 1. What specific properties on both sides of the preserve displayed sufficient additional sensitive habitat to cause rerouting not feasible? Alignment 3A is pushed so far west that it clearly passes through the hamlet of Yettam. Alignment 3B fails by reason of transecting a portion of the Reserve that is said to also traverse federal designed (sic) critical habitat for Hoover's spurge and vernal pool fairy shrimp and vernal pool tadpole shrimp beyond the

I79-1
cont.

I79-2.

northern limit of the Reserve. There is no indication that this alignment was surveyed for the primary constituent elements of habitat outside of the Reserve. The band identified as habitat is so narrow that it could be easily spanned without disturbing the underlying land. Alignment 3C was deemed the nearest available alternative, but fails to resolve location on previously disturbed lands and opportunities for spanning critical biological resources.

Q 2. What specific properties on both sides of the preserve contained building improvements of sufficient sizes and values to cause rerouting not feasible? Although this question was not answered in writing, the choice of Alignments 3A and 3C transect neighborhoods in the hamlets of Yettum and Seville, indicating there was no effort made to route around the residences.

Q 3. Please list the other physical constraints on both sides of the preserve that cause rerouting alignment to be infeasible? The reply failed to respond to this question by identifying any other physical constraints.

Q 4. For each physical constraint listed in the answer(s) to Q 3 above, please indicate which specific properties cause rerouting alignment to be infeasible? See commentary 3 above.

Q 5. Please detail the analysis by which the conclusion is reached that a bypass around the Stone Corral Ecological is not feasible. The memorandum’s analysis indicates all three alignments fail to locate a feasible reroute alternative.

The alignments 3A, 3B and 3C depicted in figure 1 of the memo, fail to demonstrate a good faith effort to avoid any of the potential biological and other constraints to location of a feasible routing alternative. In light of the importance and the consequences of this determination, **the response of the ESA biologist is woefully inadequate and misleading.** It falls short of the CEQA requirement that there be a good faith effort to inform decision makers and users of this EIR.

And, as Shirley told you in the Woodlake scoping session, our son Greg would be happy to identify sources information acquired during a biological study of the region made specifically for acquisition of habitat property by the California Department of Fish and Game. This work served as the biological assessment for the location and acquisition of the Ecological Reserve. He would have provided names, dates and specifics for your consideration. Nobody called.

Hydrogeology and Agricultural Resources

The DEIR chapters on Agricultural Resources, Hazards and Hydrology (4.7-11k) are woefully misleading by indicating that all direct and consequential impacts to underground water supplies can be mitigated by closing, abandoning and relocating existing wells and underground transport and delivery systems. The suggested mitigation is:, “SCE shall identify wells that would not have the required minimum ground clearance to perform any necessary well maintenance and shall engage a qualified water well drilling contractor to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location.”

Thus, the DEIR implies an aquifer of uniform hydraulic dimensions and quality uniform throughout the study area. There is a convincing body of factual data, knowledge and expert

179-2
cont.

179-3

opinion to the contrary. Missing from the Bibliography (P. 4.6-3) are these important hydrogeologic reference works:

- Technical Studies in Support of Factual Report – Exeter Irrigation District, United State Department of the Interior - Bureau of Reclamation Jack W. Rodner November 1949
- Technical Studies in Support of Factual Report , Ivanhoe Irrigation District, USBR 1942
- Nicely, Timothy and Gardner, David A., December 2003, *Water Resources Investigation of the Kaweah Delta Water Conservation District- Final Report*, prepared for the Kaweah Delta Water Conservation District, <http://www.kdwcd.com>
- Bookman & Edmonston Engineering, February 1972, *Investigation on the Water Resources of the Kaweah Delta Water Conservation District*, unpublished report prepared for the Kaweah Delta Water Conservation District, <http://www.kdwcd.com>

Agricultural Resources – Agricultural Impacts 4.2-5, p.4.2-16

The DEIR Chapter on Agricultural Resources misinforms by not emphasizing importance of water supplies. It does not recognize that irrigation water supply is the first and most critically essential element in the agricultural systems of the study area.

The DEIR states the “Proposed Project could result in temporary or permanent removal, relocation, and/or replacement of ancillary farming systems such as water pumps, irrigation pipelines and gas lines. Removing farmers’ ability to irrigate crops and orchards could effectively render formerly productive Farmland unusable, resulting in the conversion of additional Farmland to nonagricultural use”. The water pumps and irrigation pipelines are not *ancillary*. They are essential components of functioning agricultural systems. Mitigation does not make them less than significant.

The DEIR statements about scheduling conclude that, because the lands would continue to be available for agriculture, the temporary disturbance of these lands would be less than significant after implementation of mitigation measures.

Mitigation Measure 4.2-1b declares, contractors shall ... “*Coordinate construction scheduling as practicable so as to minimize disruption of agricultural operations by scheduling excavation to occur before or after the growing season.*”

“Before or after the growing season?” The citrus growing season is year-around 24/7/365. Limiting the time of use of the operating and management practice as well as the integrated components essential to the highest and best use of the unique locations of the study area would destroy the special character and appropriate agricultural use of the lands. Significant and unmitigable

The DEIR states, “*However, the CPUC recognizes that the temporary impacts to some crops (i.e., walnuts and orange orchards) could last for upwards of 10 years. While not an impact consideration in this CEQA analysis, it is noted here that the fiscal impacts related to loss of agricultural production would be addressed by SCE during its ROW acquisition process.*”

179-3
cont.

179-4

179-5

The Right of Way acquisition Cost Testimony of SCE unequivocally fails to recognize the ongoing cost of destruction of small tracts of orchard trees to make way for construction operations. The fiscal impact of marginal income reduction and tree re-establishment cost are not addressed by SCE’s proposal to provide replant trees on a one for one basis.

The University of California Cooperative Extension Service of the Division of Agriculture and Natural Resources provides several spreadsheet models that are useful in analyzing the present value of the costs and lost income for re-establishing small plantings of lost trees and vines.

Aesthetics

Clearly, the DEIR preparers do not understand the people of Eastern Tulare County and the intense “Sense of Place” they feel for their land, their spectacular views of the Sierra Nevada range, their communities and their families’ futures. This love of the region was articulated over and over in the two CPUC scoping sessions and the Public Participation Hearing before Judge Hallie Yaknin.

The DEIR is particularly disappointing because the author(s) failed to do their own work, relying instead on the Edison company’s PEA for a number of misleading Visual Simulations - “before and after” graphics of how the lines will impact the unique regional character this pristine rural area. Granted, ESA took a few pictures, but the one we’re intimately familiar with is from SCE and it is completely misleading, if not simply fraudulent.

We refer specifically to Figures 4.1-11a and 4.1-11b. This is an Alternative 1 illustration that shows lines and poles along Cottage Post Office Road (Ave. 320) looking west near our neighbor’s house. Instead of using a side-by-side comparison, SCE chose to simulate Pole #82, which is some distance from the house. From that angle and that perspective, of course it does not appear as large and visually intrusive as it should. Nevertheless, we did the same.

Curious about just how high a 120’-160’ pole might be, we tethered a helium-filled balloon on a 150 foot line from the exact location of the proposed pole identified as Structure 82 in the Road Story illustrations. It’s humongous! “Attachment B” Includes a picture we took of the balloon and several corrected versions of Figure 4.1-11b.

A web search revealed that the use of brightly colored helium filled balloons tethered at pole and tower sites and observed from all viewing points is an accepted professional method for evaluating the aesthetic impacts of pole and tower construction.

Taking the process a step further, we decided to apply it to our own viewshed – using both the tethered balloon and a friend flying his helicopter at the 150’ elevation while we took pictures from our deck. The panoramic view with poles added is included.

The visual quality from our home can be classified as “Distinctive,” in your terminology. “*Defined as visual resources that are unique or exemplary of the region’s natural or cultural scenic amenities.*” See Attachment C – the view from our deck following a Sierra snowstorm. The DEIR dismisses this view from our deck, implying the “*Proposed Project would appear co-dominant with the existing agricultural landscape features (primarily the citrus orchards and associated equipment and infrastructure).*” Baloney!

179-5
cont.

179-6

179-7

Perhaps we need to remind you the existing wooden utility distribution poles on Cottage PO Road are 35 feet high. Wind machines are 35-feet high. The new poles and towers are 120’-160’ high. This is NOT an incremental change, as SCE would like you and everyone else to believe. Incremental, is in my dictionary. Incremental is defined as a small, or slight change ... by degrees. Four times the height of existing infrastructure is not incremental!

Sincerely,



John O. Kirkpatrick and Shirley B. Kirkpatrick

Encls:

179-7
cont.



"ATTACHMENT A"

Comment Letter I79

23114 Carson Avenue
Exeter, California 93221
559-592-3422
Fax: 559-592-5852
E-mail: jkirkpatrick@onemain.com

Mr. Jensen Uchida, Mr. Doug Cover and Jason Reiger
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
Via E-mail: sjxvl@esassoc.com

Re: Draft Environmental Impact Report for CPUC A.08-05-039

Gentlemen and Environmental Team:

We have received the DEIR for this project and have begun to work through it.

Shirley and I, as well as many of our friends, neighbors, members and leaders of PACE wish thank you for the courtesy, respect and patience all of you have extended to us over the past year as you have worked your way through the study and compilation of this DEIR.

We are hopeful that we can continue this kind of relationship as we move forward submitting comments on the environmental work and the administrative proceedings ahead. It is our wish that civil discourse will continue to be the rule of the day as we critique the published work with agreement and disagreement.

It is early for an overall evaluation or rating of the work, but certainly we must acknowledge the amount of work effort that the DEIR reveals. It demonstrates that the CPUC and ESA have taken public input seriously and acknowledges the huge level of public interest in the project's impact on agriculture, communities and the environment.

It should not be a surprise that initially I am intently focused on the most important impacts, their avoidance or other mitigation possibilities. We are keenly interested in how matters bear on selection of an environmentally superior route alternative.

I have some questions about details of some of your investigations and how your conclusions were drawn from them. I don't know whether a letter inquiry is adequate, or formal Data Requests are in order. Your guidance concerning this will be appreciated. In the meantime I will ask a few initial questions in this letter. If you prefer Data Requests, I will reformat the questions as data requests.

As an aid in answering my questions, supplementing the answers with inclusion of specific Tulare County Assessor's Parcel Numbers and annotated Google images could be useful in depicting subject property and vicinity locations.

Background: In Chapter 5 – Comparison of the Alternatives, the last paragraph on page 5-7 states in part:

Biological Resources - The EIR team looked for a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological Reserve; however, a bypass was not

feasible due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the Reserve.

Comment Letter I79

Q 1. What specific properties on both sides of the preserve displayed sufficient additional sensitive habitat to cause rerouting not feasible?

Q 2. What specific properties on both sides of the preserve contained building improvements of sufficient sizes and values to cause rerouting not feasible?

Q 3. Please list the other physical constraints on both sides of the preserve that cause rerouting alignment to be infeasible?

Q 4. For each physical constraint listed in the answer(s) to Q 3 above, please indicate which specific properties cause rerouting alignment to be infeasible?

Q 5. Please detail the analysis by which the conclusion is reached that a bypass around the Stone Corral Ecological is not feasible.

Thank you very much for your anticipated response to this inquiry.

Sincerely,

John Kirkpatrick

PUBLIC UTILITIES COMMISSION

LEGAL DIVISION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298
ID 94-3031353

July 15, 2009

John Kirkpatrick
23114 Carson Avenue
Exeter, CA 93221**Re: Draft Environmental Impact Report for CPUC A.08-05-039
CPUC Reference No.: PRA 0138**

Dear Mr. Kirkpatrick:

Enclosed are the records that we mentioned in the letter we sent you on July 9, 2009.

I hope this is helpful. Please refer to PRA 0138 in all of your communications with the Commission regarding the above referenced subject matter. If you have any questions regarding this matter, please do not hesitate to call me at 415-703-3942 or email me at bwg@cpuc.ca.gov.

Sincerely yours,

Berlina Gee
Legal Analyst

Enc.

391541

memorandum

date July 9, 2009
to San Joaquin Loop (207584.01) Project File
from Brian Pittman, CWB
subject Alternative 3 alignment analysis near Stone Corral Ecological Reserve

Several variations to SJXVL Alternative 3 in the vicinity of the Stone Corral Ecological Reserve (Reserve) were examined to identify whether potentially significant impacts on wetland and biological resources at the Reserve could be substantially reduced or avoided through route modification. A reconnaissance level field survey of the Alternative 3 alignment and portions of the examined alternatives provided the basis for this analysis, and was supplemented by other resource studies that were performed during the CEQA analysis. The field review was conducted on February 11, 2009 and April 6 to 8, 2009 by ESA wildlife biologist Brian Pittman, CWB.

The Alternative 3 alignment and three examined alternative alignments that are considered in this analysis are illustrated in Figure 1. The three alternative alignments are identified in this memorandum as Alignments 3A, 3B and 3C. As the figure indicates, the existing alignment traverses the Reserve for a linear distance of 1.0 mile and parallels a portion of the Reserve for another 0.5 mile. The three alternative alignments are considered below.

Alignment 3A

Alignment 3A is the westernmost of the three examined alternative alignments and was identified as the shortest possible line configuration on lands located west of the Reserve. This alignment would add 1.0 linear mile to the length of Alternative 3. As identified in Figure 1, the alignment would traverse the community of Yettum near the intersection of Avenue 384 and Road 144, and would pass the historic St. Mary Armenian Apostolic Church of Yettum. The presence of residences within the alignment presents a significant constraint to Alignment 3A. In examining this route, the possibility of extending Alignment 3A further west to avoid Yettum was also considered; however, scattered residential development was identified well to the west such that a complex and lengthy zig-zag alignment would be required to avoid multiple condemnations. Such a route would still pass close to residential areas and would impact a variety of agricultural lands along with multiple road crossings.

Alignment 3B

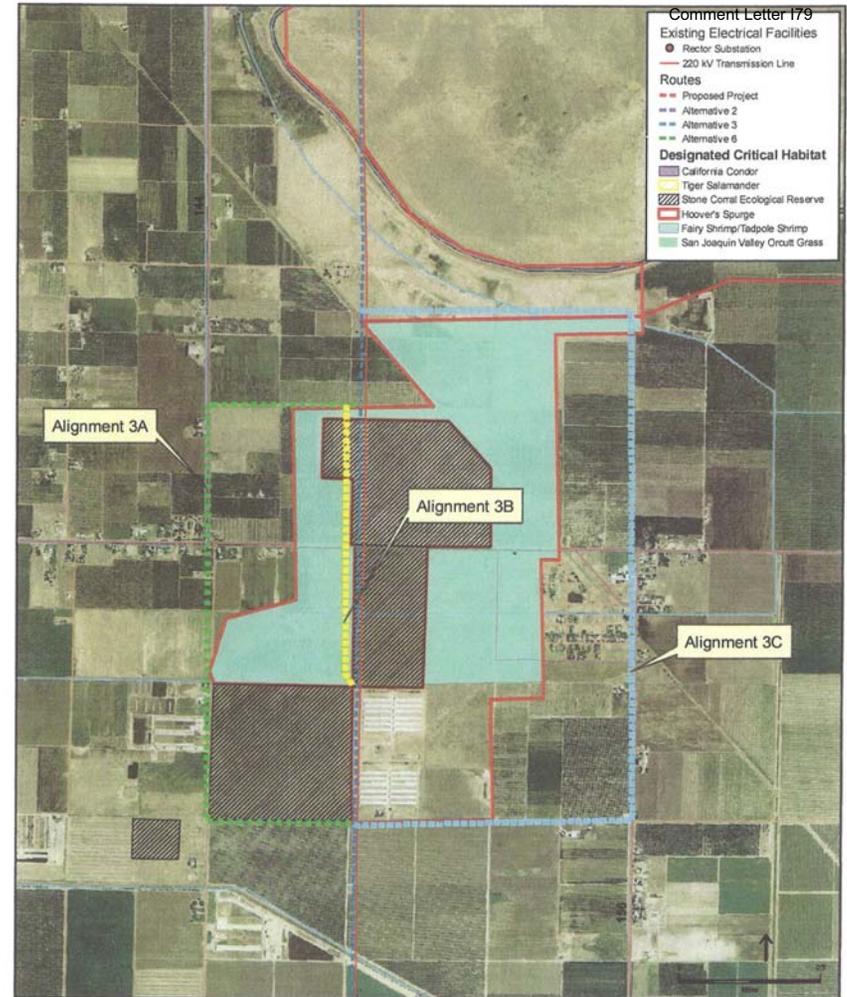
Alignment 3B was identified as a possible route that roughly maintained the proposed Alternative 3 alignment, while minimizing direct project impacts to the Reserve (see Figure 1). This alignment would keep about 0.75 miles of the transmission line outside of the Reserve, while about 0.25 mile would remain within the Reserve.

However, the revised alignment would traverse undisturbed grassland habitat that currently supports vernal pools and, based on this habitat assessment, would impact many of the same threatened and endangered plant and wildlife species found in the adjacent Reserve. As Figure 1 shows, the revised alignment also traverses federal designed critical habitat for Hoover's spurge, vernal pool fairy shrimp and vernal pool tadpole shrimp within an area that provides habitat for these species. Thus, while project effects to the Reserve would be minimized, the overall impact of this alignment to special status plant and wildlife species would remain essentially the same as for Alternative 3. One residence was identified within Alignment 3B.

Alignment 3C

Alignment 3C was considered as the nearest available alternative that would route the proposed transmission line into areas located east of the Reserve and designated critical habitat. As presented in Figure 1, the revised alignment would be 2.0 miles longer than the Alternative 3 alignment. While this alignment would successfully avoid impacts to critical habitat and biological resources within the Reserve, the 1.0 mile northern portion of the alignment would traverse annual grassland habitat that is considered to support special status biological resources similar to those that occur within the Reserve. Thus, this alignment would not avoid impacts to wetlands and special status plants and wildlife, and so would have essentially the same significant impacts as Alternative 3.

In addition to impacts to sensitive biological resources, the middle portion of Alignment 3C would traverse the farming community of Seville and would therefore be constrained by numerous residences within or immediately adjacent to the proposed alignment. In examining this route, the possibility of extending Alignment 3C further east was also considered; however, such a complex and lengthy zig-zag alignment would still pass close to multiple residences and would impact a variety of agricultural lands along with multiple road crossings.



San Joaquin Cross Valley Loop Transmission Project, 207584.01
 SOURCE: ESR, 2008; SCE, 2008; Thomas Brok Maps, 2008; USFWS, 1993, 2005, 2006, 2008; CDFG, 2008
Figure 1
 Stone Corral Ecological Reserve, Alignment 3 Alternative Routes

“ATTACHMENT B”



Existing view from Avenue 320 looking west

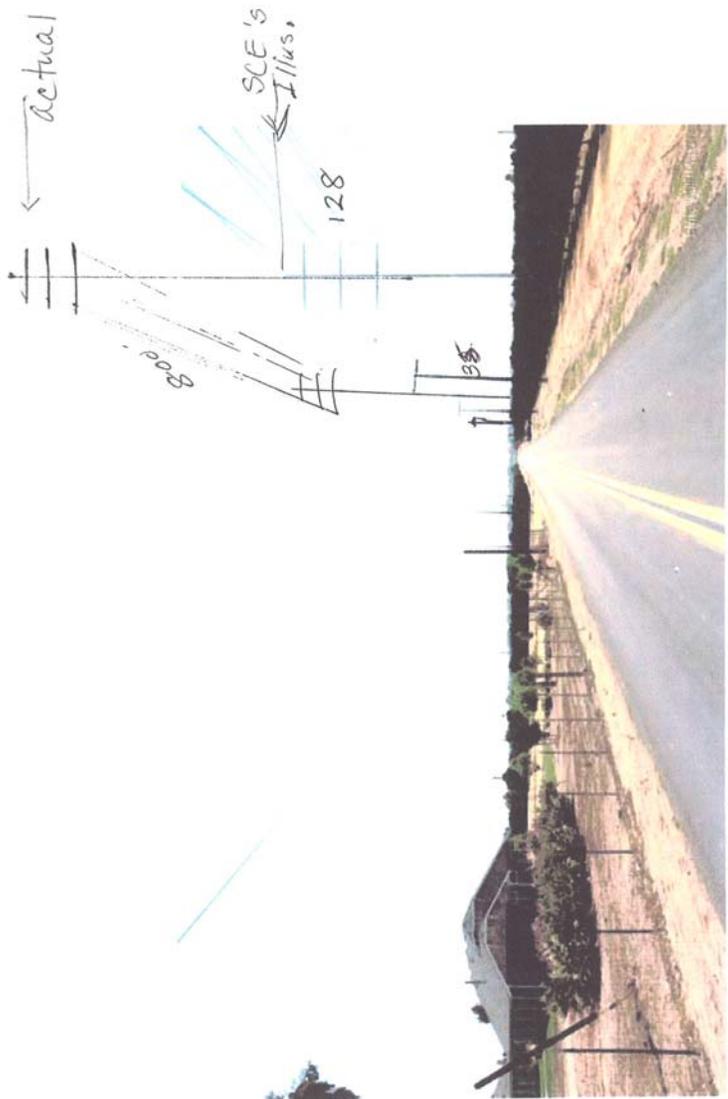


Simulation I: View from Avenue 320 looking west

SOURCE: SCE, 2008.

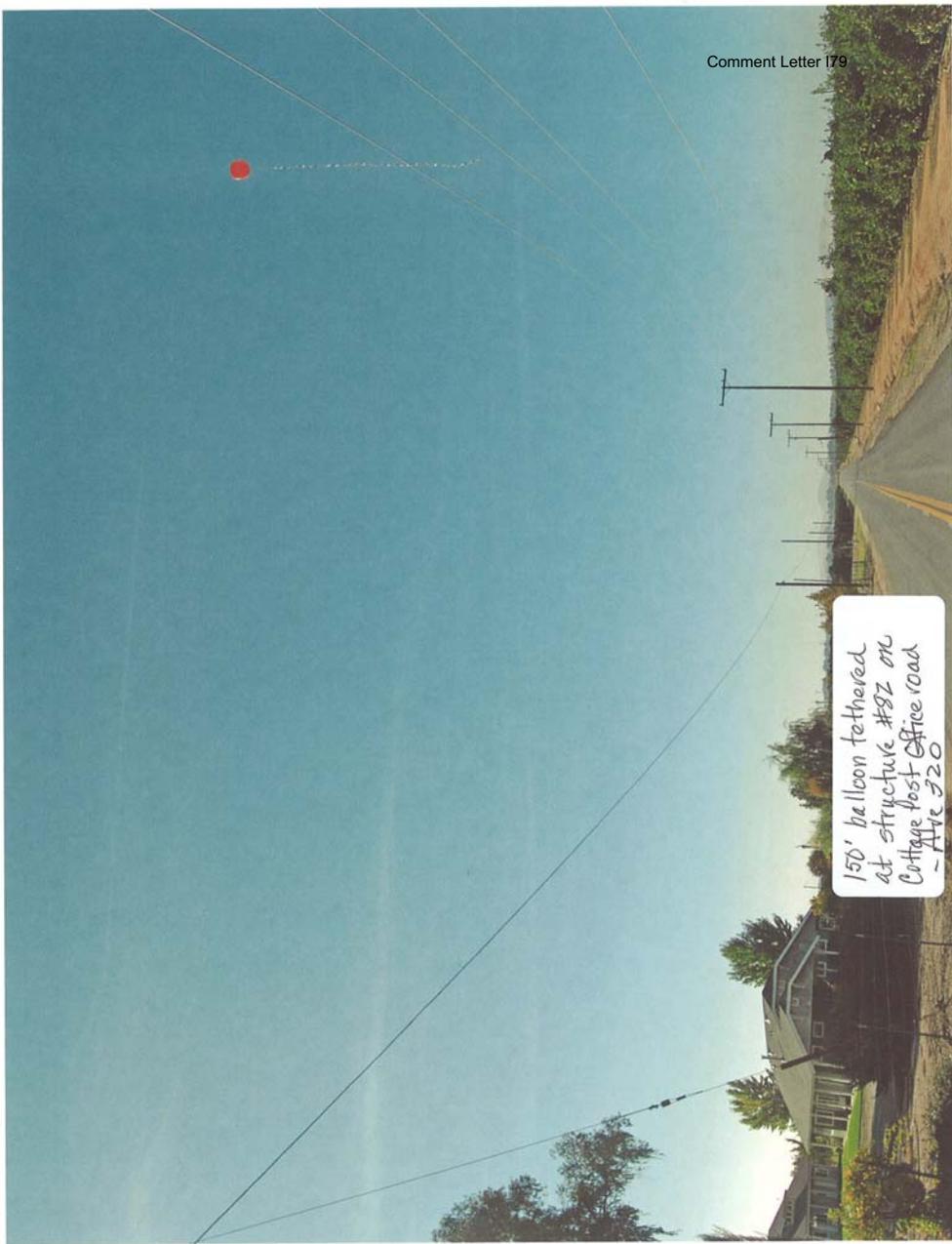
San Joaquin Cross Valley Loop Transmission Project . 207584.01

Figure 4.1-11a and 4.1-11b
Visual Simulation of Project Site



Simulation of the proposed double-circuit 220 kilovolt transmission line from Avenue 320 looking west.

Comment Letter 179



Comment Letter 179









“ATTACHMENT C”



Comment Letter I79

"Distinctive" view from Kirkpatrick home - northeast toward location of proposed project's poles & towers -

Comment Letter I80

From: D & D McKenzie [mailto:big5mac@hotmail.com]
Sent: Friday, July 31, 2009 9:00 AM
To: San Joaquin Cross Valley Loop Project
Subject: Power Lines

To: Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207
Fax: (415) 896-0332
E-mail: sixvl@esassoc.com

Dear Sir,

I am writing to you today representing my family of five. Our concern is the proposed power line routes #1, #2, and #6. For over 20 years, my three children, my husband, and I have enjoyed many wonderful days of adventure as we have visited in the Elderwood/Woodlake area. My sister and her husband ranch on the Hengst Farms land and we have been privileged to enjoy many of the aspects of having such vast property to enjoy in so many ways.

Through the years my children have learned to work with cattle, been taught about the many varied aspects of growing fruit crops in the orchards, they have had the adventure of learning how to target shoot, ride a quad, and hike the beautiful hills. We have picnicked countless times, had Easter egg hunts too numerous to count, and in turn, each of my children have learned to drive a truck on the vast property available to them through their aunt and uncle.

The reality that Hengst Farms is threatened by the power lines from the proposed route is disheartening, to say the least. Please consider running these vast power lines along route #3, skirting the vernal pools, and saving as much farmland as possible.

Your careful consideration is appreciated and by choosing route #3, you will not only be saving valuable farmland but you will also be saving Hengst Farms from ruin.

Thank you for your time,

The McKenzie Family

Darcy McKenzie
David McKenzie
Ian McKenzie
Kalee McKenzie
Drake McKenzie

Windows Live™ SkyDrive™: Store, access, and share your photos. [See how.](#)

I80-1

Public Comment Card
Tarjeta de Comentarios Públicos

San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Arturo Date/Fecha: July 31, 09

Address/Dirección: 1700 AVE 376, Elderwood CA
Mailing 410 S. 8th St. Fowler CA 93625

Comment/Comentario: July 31, 2009

To Whom It May Concern:

~~My name is Arturo Ramirez and my ranch is located at 17900 Ave 376 in Elder Wood, California. My ranch is not in the path of the power lines but close by. I have read the E.I.R report and found several issues that will impact my ranch. One of my main concerns about Alternate #2 is the possible damage to the underground aquifer. The footings for the towers, as I understand it, are over 60' deep. How will this affect the aquifer? I have a well located west of the corner tower and trellis where it heads south along the Kern Friant Canal, about 1/2 a mile from the path of the lines. This well is used to irrigate lemons on the south side of my ranch. I do not have district water on this ranch, therefore this well along with two others are my only source of water for our lemon trees and eventually my home. You can see my concern, as it took me two times to find water for this well. I would hope that you would take a closer look at Route #3, as it has easements already in place and the vernal pools can be mitigated. I am a small farmer and the development of this 89 acres ranch is quite a financial under taking for me, and wells are expensive and don't always produce. This would be a major setback for me and I would have never invested this amount of money in the land and lemons, if I knew that my water source was in jeopardy. Thank you for your consideration on this issue and please consider Alternate #3.~~

Sincerely,
Arturo Ramirez

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

181-1

182-1

182-2

From: Lynette Ramirez [mailto:hlsbramirez@sbcglobal.net]
Sent: Friday, July 31, 2009 11:21 PM
To: San Joaquin Cross Valley Loop Project
Subject: power lines

Dear Mr. Jensen Uchida,

I am writing to express my concern about the proposed power line route. My address is 28687 Rd. 148 in Visalia, directly north of the substation. No matter what route you take our property will be affected. We are actually somewhat encouraged that the powerlines will be taller and have fewer poles on our property. This is especially concerning since we have three small children.

My personal request is that we would receive proper notification of when our property will be affected, and on how large of a scale. We currently farm mandarin oranges under the current power structure. Considering the fact that the new lines are proposed to go in during the winter months is particularly concerning since watering the trees is our only source of frost protection. We would appreciate knowing the exact location of the proposed poles and how they would affect our farming operation.

My second and greatest concern is over the proposed route 2 line. This would run directly through the Hengst property in Elderwood. Being the daughter of Bob Hengst, I am particularly concerned that this route would completely destroy a long established farming operation. This would be heartbreaking to our family and also affect future generations of our family.

It was the desire of my husband and I to one day move on to the Hengst property in the exact path of the route 2 line. To top things off, we have been unable to sell our current property largely because of the devaluing of our property value due to the existing lines. Although we currently have about 30 acres. We have been told that the 15 acres surrounding the powerlines is of little to no value.

Although I realize we need to update our power system and that our current property will have to be affected in some way, I am pleading with you to show some common sense and take the alternative route 3.

Sincerely,
Lynette Ramirez

Public Comment Card
Tarjeta de Comentarios Públicos



San Joaquin Cross Valley Loop Transmission Project
Draft Environmental Impact Report

Commenter Name/Nombre: Hudson Rose Date/Fecha: Jul 30, 2009
Address/Dirección: 18001 Ave 376 Visalia, Ca 93292

Comment/Comentario: _____

To Whom it May Concern, 7/29/09

My name is Hud Rose, and I live at 18001 Ave 376, Visalia CA 93292, along with my wife and four year old son. My property and my home is a stone's throw from the proposed tower in Alternate 2 where it comes through "Mud Gap" and makes a left heading south along the Kern Friant canal. My ranch runs along the east side of the canal. I have two concerns about the proposed route that I feel the E.I.R. report did not address properly.

First, how will the power lines affect the health of my family? I have heard different stories about the power lines, and the report was not very clear on this. The power lines will cross my ranch on the south end. Will this also have a possible effect on my livestock? Will the power lines produce noise? And if so will this be within reason? Second, the footings for the towers will go down 50' to 70'. Will this affect our underground aquifer that supplies our pump? Our only source of water is our pump. At the present time I am supplying my mother-in-law with water; her pump went dry this year. Her property is directly across from mine. It's almost impossible and very expensive to find good producing water for a well in this area. She just spent \$15,000 to put in a new well and came up dry. Will the footings affect our only water source?

Our family has lived in this area our whole lives. We believe that these power lines will affect our lives and our way of living. We pray that you would consider a different route, one that is already in existence and that would not cut up our countryside with power lines and take away from farming and livestock industries. I ask that you put yourself and your family in our shoes and see what we would have to live with. Thank you for your time and consideration on this matter.

Sincerely,

Hudson Rose
Hud Rose

183-1

By submitting comments on the Draft Environmental Impact Report (EIR), you will be sent a copy of the Final EIR. Please indicate the format in which you would like to receive the document:

Todos que presentan sus comentarios sobre el Borrador de la EIM recibirán una copia de la EIM Final. Favor de elegir el formato en el que desea recibir su copia de la EIM Final:

Compact Disc/Disco Compacto Paper Copy/Copia Impresa

Corky & Laura Wynn
1524 W. Mariposa St.
Lindsay, Ca. 93247
559-562-2942
corkywyn@ocsnet.net

Comment Letter I84

7/31/2009

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
C/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Dear Sir:

Please let me weigh on the transmission line across the east part of the SJ Valley.

I have been watching and thinking of the ramifications of the three routes under scrutiny.

If I could I would vote for the most northerly route, Route 3.

As a common sense older fellow, I see no reason to cripple or kill the livelihood of free enterprising farm folks on Route 1 and 2. The only big drawback I hear of in Route 3 is the vernal pools. That should be no problem. West of Lindsay the folks wanting vernal pools (native hog wallows) came in with back hoes and imagination and rebuilt some after several years of successful farming practices were passed. In a few years I won't tell and the young'uns will think they have been here since the big flood.

In my understanding the main character on this earth is mankind. If we must relocate a few shrimp and smelt (Sorry, another subject bearing on our mind) for the benefit of all mankind who want to enjoy the needs and pleasures of electricity and quality food lets do it on route 3. The environmental circumstance doesn't even tip the scale to good common sense practices

If we had to wait for an EIR the ark would not have been built. Maybe that is what made the vernal pools and hog wallers in the first place. Maybe.

Thanks for allowing our input.

Sincerely,

Cloren "Corky" Wynn
Cc: Hengst Family Farms

184-1

My name is Scott Belknap and I own and operate Belknap Pump Company. I am a third generation well driller, we drill water wells, repair pumps and I am an electrician. I have also served on the Alta Irrigation board of directors. Thank you for taking the time to hear my story.

I am very concerned about any wells, pumps, electrical panels and irrigation systems that are within 100 feet of any conductor lines. As I read through the EIR, (proposed project and the alternate road routes) I took notice to the fact that the all the new poles show the bottom conductor sag at a minimum of 32ft off the ground and that many wells, pumps and irrigation stations are **under** or within 100ft of the conductor lines. In my business we use cranes, hoist trucks, pump pulling rigs. A typical well drilling rig has a height of approx 55 to 60 ft, most pump pulling rigs are 35 feet or more in height, and the flex lifts and hoists can have an extension that can go up to 90 feet. All are subject to static electricity charges. Knowing this I cannot put myself or my employees at risk by working within a 100 ft of these new proposed lines. My little pump company has 14 employees we live in communities of Dinuba, Kingsburg, Visalia, Reedley and Orange Cove and we are absolutely depend on our agriculture customers, 95% of my business is agriculture, in fact my some of my largest accounts are in the proposed Alternate routes. If these growers loose acreage I loose income, not only income now but income in the future. I know some of them will not be able to financial recover from acreage lost due to these proposed lines. Every dollar we earn from agriculture is a dollar we put back into our local community at the grocery store, the repair shop, the local barber shop all of these business depend on agriculture. It is not enough for SCE to compensate a grower, what about those who that grower supports this is why we need to leave as much farmable land in production. This is why I am asking the PUC to choose route #3. Mine and many others livelihood depends on how many farm acres remain in farming. So please choose Route # 3 it has the least amount of Prime farm land.

Sincerely

Scott Belknap

Scott F Belknap

I85-1

I85-2

*Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street Suite 1700
San Francisco, CA 94104-4207*

Dear Jensen Uchida,

Please, help us! Our family has ^{been} farming in the central valley for 3 generations and each year we are proud to say that we contribute to feeding the world. However, Mr. Uchida, our way of life and the way in which we ~~work~~ make a living would greatly be impacted by the power line routes 1, 2, and 6.

I86-1

Route 3 remains the best alternative for everyone and for many reasons.

Please do not use route 1, 2, and 6.

AND

Yes, for Route 3

Sincerely,

The DeLeonardis Family

Bill Ferry
37445-b Millwood Drive
Woodlake, Ca. 93286

I am a fourth generation resident and farmer of Elderwood. My Great Grandparents came to Woodlake around the turn of the century to help build the city streets of Woodlake. They soon purchased property in Elderwood and planted the ranch to Oranges in 1913. I farm this ranch today. My forefathers chose to settle in this area for its pristine beauty. There are very few places left in California that have the intrinsic beauty of Elderwood.

I have many concerns regarding this proposed project. First of all the health issues involved with living and working in such a close proximity to the power lines.

The water availability in the Elderwood Valley is unique. There are three aquifers in this Valley the first is between 30' to 40' in depth. The second is located at 50' to 60' feet and the third is between 90' to 100' feet. The aquifers are under ground rivers that ebb and flow in different directions. Finding water in this Valley is risky and costly. You can have a good producing well in one spot and move a few feet in another direction and have a dry hole. If growers are forced to move their wells there are no guarantees that they will obtain similar water. I have a grave concern that the tower foundations may disrupt the current aquifer structure and cause problems with our neighbors that are not even close to the power lines. This has not been addressed in the current EIR.

I87-1

The EIR does not address the impacts on Family farms or their employees from the reduced profitability and this route may eliminate jobs.

I87-2

The reduction of the real estate values will be insurmountable. We will never be able to sell our properties for what they were once worth. Nor will the property be utilized in a profitable manner.

Route 3 is the best alternative to any of the proposed routes. Route 3 does not disrupt as much Agricultural property, livelihood or homes. The existing right of way through Stone Corral Ecological Reserve will need to be updated or repaired at some time in the future. It might as well be addressed now.

I87-3

Sincerely Yours,

Bill Ferry
Bill Ferry

My name James K Jordan I am married and have two daughters we live and farm in the Route #2 and Route # 6 area. I want to thank you for taking the time to come and hear our comments.

As I read through the Draft EIR I found many explanations of how things are to be done, what type of equipment is to be used, what it is all suppose to look like when done, but I did not see any mention of how people are suppose to operate their farms during construction or how or if they would be able to farm after the lines are completed.

In others words the EIR fails to identify, address or define mitigation measures to offset impacts to farmland and farming practices. The EIR fails to identify or address any mitigation measures to offset the impacts to Hydrology and Water quality.

IX (H) 188

As I stated before I make my living from the land, I am a farmer, and in order to farm you have to have land and water both of these items may not be available after these lines are placed. (EIR page 8-12, 13 Impact 4.2-4 and 4.2-5) Sure SCE will pay growers some amount of money for the land, but growers will not be able to recycle or invest that money back into the community. We here in the valley are dependent on one another, the fertilizer company, the trucking business, the propane guy these are all part of farming and this is what the valley's economy runs on, Agriculture. If you doubt that look at the small farming communities who are suffering because of no water or because farming operations went out of business.

mitigation

I88-1

I tell you I have a hard time understanding how placing power lines over prime farmland helps the public, or helps the valley communities. Every acre lost to power lines is an acre that could be putting money back in to the local economy.

It seems unjust to ask a farmer to give up his farmland that drives our economy, and then later charge that same farmer for the power that he has already paid for by giving up the right to make income from that land. This is why I am asking the PUC to consider Route # 3 which has the least amount of farmland impacted. Page 5-4 Alternate #3

Sincerely
James K Jordan
James K Jordan
Muddyboot Ranches
33880 Road 164
Visalia, Ca, 93292

To whom it may concern:

My residence is 37050 Millwood drive Elderwood, CA. My family and I have lived in the Elderwood community my whole life. This community is very agriculture based. Most people make a living this way. By running these hideous power poles through our community it could put many out of business, not to mention ruin the beautiful view we all wake up every morning to. It is my understanding that these power poles are going to be located directly to the South of my residence, ruining the view we have of the mountains, devastating our neighbor farmers livelihoods, and ruining our property value. Health risks are also a concern, we do not want our children to be exposed to electric and magnetic fields! We purchased property here 4 years ago, and just had our first child this is alarming to us! We are sure that this will be a very negative impact on the community and quality of life of those who reside here. We hope you take our concerns into serious consideration and reconsider route 3.

I89-1

Sincerely,

Robert Bennett Lea III

*Robert Lea
Tamera Tambell-Lea
37327 Millwood Dr.
Woodlake, CA 93286*

My name is Gus Marroquin I am a farm labor contractor. I own and operate Mid Cal farm labor. I live in the town of Orosi with my a wife and four children.. I want to thank you for coming here today to listen to what I have to say. I grew up working in the fields, some of the same fields that are proposed to be removed because of the power lines. I have made my living in these fields all my life. I am very concerned about proposed Alternate route numbers 1, 2, 6 because they all remove valuable farm acreage that can't really be replaced. My largest growers farm in these routes and I know that they will lose acreage. My company employs 20 people year round and up to 80 people at the busiest time of the season. We are absolutely dependent on agriculture. My employees live in the communities of Cutler, Orosi and Dinuba. These small communities are hurting not only because of the general bad economy but particularly because of the bad farm economy. There are fewer and fewer growers able to make it today. Just this year we lost three major stone fruit companies who farmed not even 30 minutes away from here. Even now as I speak thousands of people in Mendota and Huron are out of work, why? Because no water is flowing to the Westside, no water, means no farming, no farming means no farm workers working. If my growers lose acreage, I lose work and my employees lose work. Our money gets spent right here in these communities. As the farm goes so do we. If these power lines take out farm acreage we all suffer. This is why I am asking the PUC to consider and choose the route with the least amount of prime farmland route # 3.

I90-1

Thank you

Gus Marroquin



SCE LOOP TRANSMISSION LINE EIR HEARING 7/23/09

- MY NAME IS MIKE OLMOS AND I AM ASSISTANT CITY MANAGER AND COMMUNITY DEVELOPMENT DIRECTOR FOR THE CITY OF VISALIA. I HAVE OVERSEEN COMMUNITY PLANNING IN VISALIA FOR 8 YEARS.
- THE CITY OF VISALIA IS THE LARGEST, MOST URBANIZED CITY IN THE TULARE COUNTY AND KINGS COUNTY REGION, WITH APPROXIMATELY 123,000 RESIDENTS, EXPECTED TO GROW TO 165,000 BY 2020.
- ALL OF THE ALTERNATIVES BEING CONSIDERED WILL SIGNIFICANTLY IMPACT LANDS IN THE CITY OF VISALIA THAT ARE DEVELOPED, AND LANDS THAT ARE PLANNED FOR FUTURE DEVELOPMENT.
- WHILE AT THIS TIME THE VISALIA CITY COUNCIL IS NOT SUPPORTING OR OPPOSING ANY ALTERNATIVE, OUR CITY IS VERY CONCERNED THAT POTENTIAL IMPACTS CAUSED BY THE PROJECT AND AFFECTING OUR COMMUNITY ARE PROPERLY AND EFFECTIVELY MITIGATED.
- DURING THE SCOPING PERIOD, THE CITY SUBMITTED A LETTER DESCRIBING NUMEROUS POTENTIAL IMPACTS AND WE EXPECTED THE EIR TO FULLY ADDRESS THESE CONCERNS AND IDENTIFY APPROPRIATE MITIGATION MEASURES. WE WERE DISAPPOINTED WHEN WE SAW THAT THE EIR DID NOT DO SO.
- THE CITY WILL FILE WRITTEN COMMENTS ON THE EIR DURING THE FILING PERIOD. HOWEVER, I WILL TOUCH BRIEFLY ON SOME OF OUR CONCERNS AT THIS TIME.
- REGARDLESS OF THE ALTERNATIVE SELECTED, VISUAL IMPACTS FROM THE PROJECT WILL BE VERY SIGNIFICANT. THE HEIGHT OF STRUCTURES WILL APPROXIMATELY DOUBLE, FROM 63 FEET TO OVER 120 FEET. THE NUMBER OF LINES WILL DOUBLE AS WELL.
- CURRENTLY, THE TRANSMISSION LINE HEIGHT IS IN SCALE WITH HEIGHTS OF MATURE TREES. THIS HELPS BLEND THE LINES AND STRUCTURES WITH THE NEARBY URBAN ENVIRONMENT. THE PROPOSED FACILITIES, BOTH POLES AND LINES, WILL BE WELL ABOVE THE TREE LINE AND WILL PROVIDE A MUCH GREATER VISUAL IMPACT TO OUR COMMUNITY. THIS MEANS THAT THE VIEW FROM EXISTING

I91-1

HOMES AND PROPERTIES NEAR AND ADJACENT TO THE LINES WILL BE MUCH MORE IMPOSING. IT ALSO MEANS THAT THE LINES WILL BE VIEWED FROM A GREATER DISTANCE, THEREBY CAUSING VISUAL IMPACTS TO A MUCH LARGER AREA AND TO HOMES AND PROPERTIES THAT HAD NOT BEEN VISUALLY IMPACTED IN THE PAST.

I91-1 cont.

- THE EXISTING POWER LINE SYSTEM IS LOCATED ON THE EAST SIDE OF THE COMMUNITY, WITHIN THE VIEWSHED OF THE SIERRA NEVADA MOUNTAIN RANGE. THE VIEW OF THE SIERRAS IS CHERISHED BY PEOPLE RESIDING AND VISITING OUR COMMUNITY. THE INCREASED HEIGHT OF STRUCTURES AND INCREASED HEIGHT AND INTENSITY OF POWER LINES WILL SIGNIFICANTLY DEGRADE THE VIEW OF THE SIERRAS FROM MUCH OF OUR COMMUNITY.

I91-2

- THE PLANNED RAISING OF STRUCTURES AND INTENSIFICATION OF POWER LINES WILL ALSO CREATE A SIGNIFICANT OBSTACLE TO COMMUNITY PLANNING AND NEIGHBORHOOD QUALITY. THE CITY'S GENERAL PLAN PROJECTS URBAN GROWTH DURING THE NEXT DECADE TO ROAD 152, LOCATED ½ MILE TO THE EAST OF THE POWER LINE EASEMENT. THIS FUTURE GROWTH AREA IS ENVISIONED TO CONTAIN A FULL RANGE OF LAND USES AT URBAN DENSITIES. SUBSTANTIAL URBAN DEVELOPMENT WEST OF THE POWER LINE IS ALSO EXPECTED AS THIS PORTION OF OUR COMMUNITY BUILDS OUT. DEPENDING ON THE ALTERNATIVE SELECTED, THE EXITING POWER LINE EASEMENT, PROPOSED FOR INTENSIFICATION, WILL EVENTUALLY BE SURROUNDED BY DENSE URBAN DEVELOPMENT FROM RECTOR STATION TO ROAD 152 OR TO THE ST. JOHN'S RIVER, AS DISTANCE OF ABOUT 1.5 TO 4 MILES, DEPENDING ON THE SLECTED ALTERNATIVE.

I91-3

- THIS PORTION OF THE COMMUNITY WILL ALSO CONTAIN A FULL COMPLEMENT OF PUBLIC USES INCLUDING PARKS, DEVELOPED OPEN SPACE AND WALKING AND BIKING TRAILS. THE CITY HAS PURCHASED A 100 ACRE SITE BETWEEN THE POWER LINE EASEMENT AND ROAD 152, NORTH OF STATE HIGHWAY 198, THAT WILL BE THE LOCATION OF A FUTURE REGIONAL SPORTS PARK. THESE USES WILL BE DIRECTLY IMPACTED BY THE POWER LINE FACILITIES, AND THE IMPACTS WILL BE GREATLY INCREASED WITH THE PROPOSED INTENSIFICATION OF THE EDISON FACILITES.

I91-4

- AS THE CITY PLANS FOR THESE USES IT IS CRITICAL THAT POTENTIAL OBSTACLES TO EFFECTIVE COMMUNITY

DEVELOPMENT BE MITIGATED. THE POWER LINE EASEMENT STRUCTURES, AS PROPOSED TO BE INTENSIFIED, IS A SIGNIFICANT OBSTACLE, DUE TO THE INCREASING MAGNITUDE OF THESE FACILITIES. IT IS IMPORTANT THAT MEASURES BE TAKEN TO EFFECTIVELY INCORPORATE THESE FACILITIES INTO THE URBAN FABRIC SO THAT THEY DO NOT BECOME A BEHEMOTH "NO MAN'S LAND" IN AN URBAN ENVIRONMENT.

191-5

- THERE ARE WAYS TO MITIGATE THESE IMPACTS. EFFECTIVE LANDSCAPE FEATURES, TREESCAPES, URBAN GARDENS, PLAY FIELDS, AND OTHER MITIGATIONS CAN BE IMPLEMENTED TO LESSEN THE IMPACT OF THE INTENSIFIED POWER FACILITIES. THESE TECHNIQUES HAVE BEEN USED EFFECTIVELY IN OTHER CITIES.
- THE CITY WILL DISCUSS THESE AND OTHER IMPACTS FROM THE PROJECT IN A COMMENT LETTER THAT WILL BE SUBMITTED ON THE PROPOSED PROJECT.
- THANK YOU FOR CONSIDERING MY COMMENTS.

Outline of comments for City of Visalia at EIR Hearing 7/23/09

Alex Peltzer, City Attorney for the City of Visalia, offering comments on behalf of the City of Visalia, together with Michael Olmos, Assistant City Manager

- The City does not oppose the need for the project, or assert that the project is not feasible. Nor has the City opposed one route or supported another route.
- However, the proposed project, or any of the alternatives, would have clear impacts on the City, and our primary objective is to have the Commission acknowledge these impacts and identify the appropriate mitigation measures that should be implemented to offset these impacts.
- The bottom line is that the City of Visalia believes the Draft EIR is deficient on both of these fronts. City is fully reviewing the EIR, and will be submitting extensive written comments.
- The proposed project includes modifying the current facilities (adding 6 new lines and doubling the existing pole height) in one mile of existing right of way within the City, and adding new poles and lines in new right of way a distance of 2 miles within the City's ultimate planning boundary; the alternative routes all would affect a total of four miles of existing right of way within the City, most of it abutting current development on one side and planned development on both sides.
- Based on the above, whichever project is selected, the City of Visalia experiences the most impacts of any incorporated city or unincorporated community.
- Although the Rector Substation, which will be served by this project, is located in the City of Visalia, power from the Rector Substation, which will be supplied by the new lines, will serve the entire county; the need for the project is being generated county wide, not just from Visalia
- As a broad comment, the City takes issue with the bare assertion contained in the EIR that there is no difference in the nature of the urban-related impacts as between the proposed project and each of the alternative projects (See Section 5 of the DEIR). This is clearly an error, as the urban areas affected by the proposed project are significantly different from any of the alternatives.
- This obvious shortcoming is caused by the failure to adequately identify urban-related impacts in the first place. Little to no analysis was provided to support the DEIR's conclusions regarding impacts to urban areas of Visalia on the following CEQA topics: visual impacts, impacts to land use planning; noise impacts; transportation and traffic impacts, and population and housing.
- The City made initial written comments in advance of the DEIR on all of these topics; these comments do not appear to have been considered by the drafters of the DEIR. We are obviously disappointed that the City's comments have been ignored to date.
- Michael Olmos, Assistant City Manager for the City of Visalia, will follow me tonight with more details on the types of impacts the City anticipates. Further, each of these areas will be expanded upon in written comments.

192-1

192-2

- At the same time, the City believes there are appropriate mitigation measures that are available to offset the impacts that should be addressed by the EIR. These mitigation measures focus on making the power pole right of way more visually acceptable, reducing interferences with other public facilities and future private development, and providing opportunities for public use of the right of way, all of which will ameliorate a number of impacts: Mr. Olmos will be making comments to elaborate on these mitigation measures, and they will also be the subject of formal written comments.
- Finally, the City will be making written comments regarding a failure of the EIR to adequately describe the project, or its alternatives, as it relates to the nature of property rights that will be acquired under each project or alternative project. There has been discussion, not reflected in the DEIR, that in areas of existing right of way, modifications called for by the project will trigger the need for SCE to acquire additional right of way rights. Currently, SCE owns an easement right, which leaves significant rights to use the property by the underlying property owner. The additional rights that have been described as potentially being required for this project are not necessarily additional land, but rather more complete property rights in the form of either fee ownership of what is now a right held by easement, or expanded easement rights to decrease the amount of use that the underlying property owner can make of the land within the right of way. If either of these is triggered by the project or the alternatives, this action would have foreseeable impacts, including the disuse or non-maintenance of the underlying land, ultimately leading to blight. In order to assess these impacts, and determine appropriate mitigation, the actual actions contemplated need to be described in the document in greater detail.

I92-3

I92-4

Dear Mr. Uchida,

We believe that Edison's Alternate Routes 2 and 6 will not only place our water supply in serious jeopardy, but it will also reduce large amounts of citrus farmland.

Although it has been promised that the wells having to be removed will be replaced, it cannot be promised that the same volume of water will be located; due to the nature of our water table.

Elderwood is a beautiful area and the number of lattice towers will absolutely ruin our area.

Also we do not believe that Route 3 has been fully investigated.

Please reconsider using Routes 2 and 6 due to the loss of farmland, our water supply, the beauty in these areas, and the economic hardships.

Thank You,

Mike and Sharon Potts
36680 Millwood Dr., Woodlake

I93-1

To whom it may concern:

My residence is 37050 Millwood drive Elderwood, CA. My family and I have lived in the Elderwood community my whole life. This community is very agriculture based. Most people make a living this way. By running these hideous power poles through our community it could put many out of business, not to mention ruin the beautiful view we all wake up every morning to. It is my understanding that these power poles are going to be located directly to the South of my residence, ruining the view we have of the mountains, devastating our neighbor farmers livelihoods, and ruining our property value. Health risks are also a concern, we do not want our children to be exposed to electric and magnetic fields! We purchased property here 4 years ago, and just had our first child this is alarming to us! We are sure that this will be a very negative impact on the community and quality of life of those who reside here. We hope you take our concerns into serious consideration and reconsider route 3.

I94-1

Sincerely,

Tami Tarbell-Lea

Tamara Tarbell
37327 Millwood Dr.
Woodlake CA 95286

PARCELS # 112-200-011-000
112-200-012-000

I am Bob Ward. I am a fourth generation citrus grower. We have a 80 acre family farm in the path of the proposed Route 1 power lines.

It would take about 9 acres of our prime young citrus trees out of production at a loss of about \$25,000 per year. A 30 year loss would add up to \$750,000. The power lines would lower the value of the property considerably.

I95-1

The power lines would interfere with our irrigation pipelines, canal water delivery lines and our wells. The EIR does not address the relocation of wells. This would be very expensive for us to replace these.

I95-2

The EIR does not recognize that the cleared land under the power lines would create a path for dirt bikers, trash dumping, and trespassing for thieves and vandalism.

I95-3

Farmworker safety is a real concern of ours. The EIR does not address this issue and the Health of our families living near the power lines.

I95-4

The use of helicopters for spraying and frost protection would create a very hazardous Situation. The EIR does not address this.

We favor Route 3 as it has a lot less impact on developed agriculture. Thank you for your consideration in this matter.

I95-5

Robert Ward
20589 Ave 3000
EXETER, CA 93221
(559) 592-3004 HOME
(559) 592-1696 FAX

From: Diane King [mailto:dianeeking@hotmail.com]
Sent: Saturday, August 01, 2009 7:21 PM
To: San Joaquin Cross Valley Loop Project
Subject: Edison proposal

Mr. Jensen Uchida
San Joaquin Cross Valley Loop Transmission Project
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104-4207

Dear Mr. Uchida,

I write regarding the proposed new high-capacity power line to be run from Big Creek to Visalia. I would like to express my support for the third proposed route because it would do the least damage to farmland.

I am a relative of the Hengst family, whose members operate Hengst Farms, which would be deeply impacted by the PUC's route. I therefore write out of concern for my family members. But I am also concerned about the impact of development on farmland, especially farms that are operated by family farmers, who are a disappearing breed in this country. Farmers are being squeezed from many different directions - by the global economy, by local development in service to an increasing population, by an increase in regulations, and by other factors. Development in the form of electricity is usually a good thing, but it should be carried out with the least impact on the small farmer.

There is no route that will satisfy absolutely everyone, and I do realize this. I realize there are environmental considerations, although it seems that those can be satisfactorily addressed with any of the three proposed routes. But in any case I urge you to choose a route that has a low agricultural impact and does not go through the Hengst properties.

Sincerely,

Diane King
Lexington, KY

I96-1

RE: DOCKET NUMBER A.08-05-039 SOUTHERN CALIFORNIA EDISON'S
SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT

July 2, 2009

Mr. Jensen Uchida, CPUC Project Manager
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, Ca 94102

Dear Mr. Uchida,

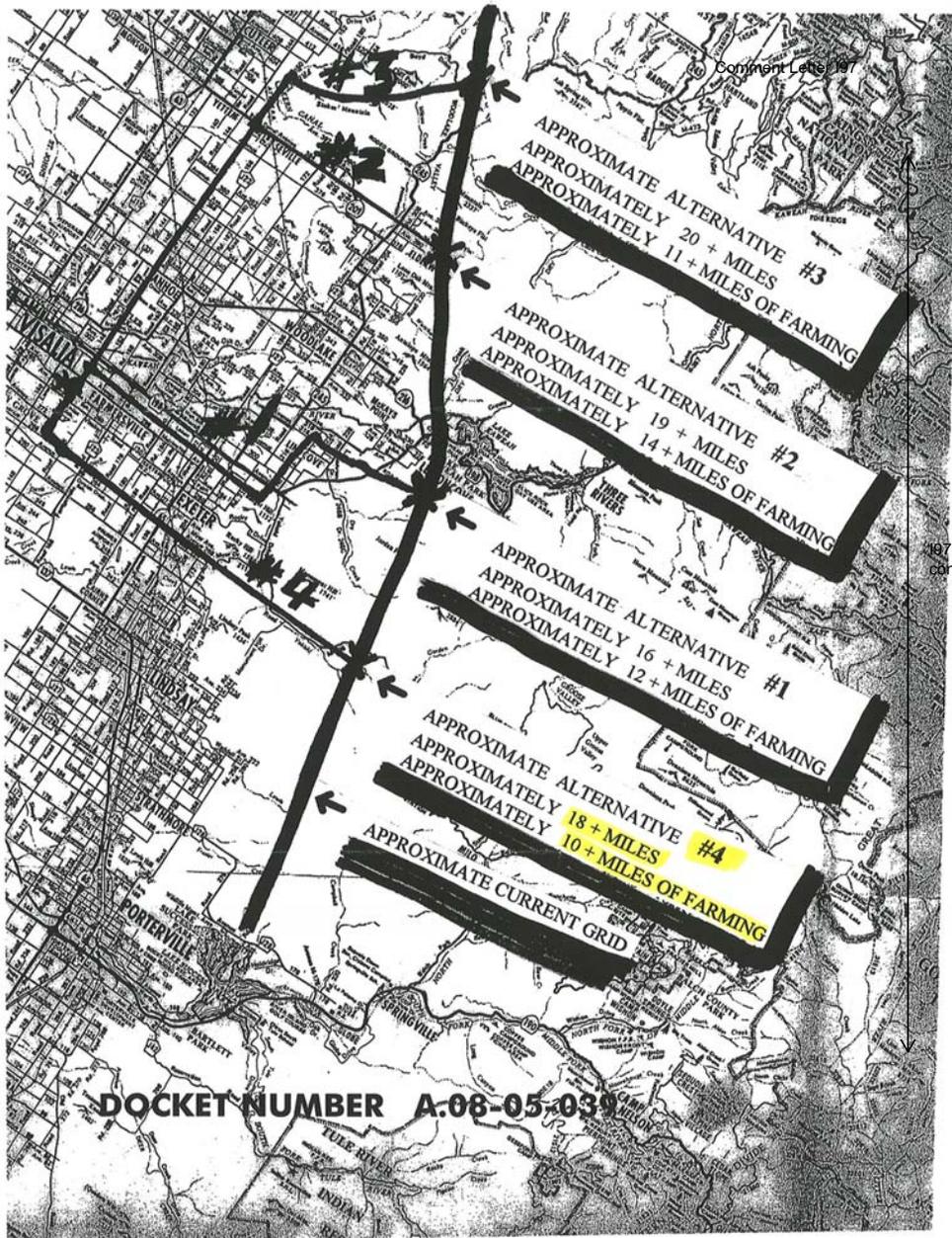
Could you please explain to me in plain simple terms why Alternate # 4 is not the best route to the power grid? From my simple calculations, (See enclosed map) it looks like the best route, and more economical.

Sincerely,



Patty Colson
P.O. Box 237
Tulare, Ca 93275

I97-1



May 25, 2009

Comment Letter I97

Mr. Jensen Uchida, CPUC Project Manager
 California Public Utilities Commission
 505 Van Ness Ave.
 San Francisco, CA 94102

Dear Mr. Uchida and Commissioners,

Enclosed you will find a copy of a letter I wrote several months ago, and also a map of the area where Southern California Edison Company proposes its San Joaquin Cross Valley Loop Transmission Project (A.08-05-039).

I am opposed to Route #1, because it runs along State Highway 198, which leads to the Kings Canyon National Park and the Sequoia National Park, where the Giant Forest is located, with the "World's Largest Redwood Trees". These parks are visited by thousand of vacationers from all over the world, every year. They come here to visit our parks, to camp and hike, and to see those beautiful trees.

Our visitors also, enjoy the beauty of the drive up State Highway 198, through our foothills, on their way up to the parks.

It will be very regrettable in the future if Route # 1 is chosen for this project. It will ruin the view up State Highway 198, for our many thousands of visitors to this area.

The enclosed map shows the approximate location of all the routes considered. P.A.C.E. is requesting you reconsider Alternate Route # 3. I would also, recommend if that does not work, you should reconsider Alternate Route # 4.

Alternate # 4 could be two straight paths up to the connecting power lines, just up in our foothills, and looks like a more workable avenue to place this project.

I would like to ask you, to come visit our area before you make your decision and travel those routes and see for yourself. It is not good to make a decision from just looking at a map, you need to come see for yourself, just what our concerns are. (We, will have to live with your final decision.)

The yellow highlights on the map, are where our visitors travel to get up to our National Parks.

Please consider all the options and come see them before you make your final decision. We are the ones who live here, and will have to live with what you choose. Please make the right choice.

Sincerely,

Patty Colson
 P.O. Box 237
 Tulare, Ca. 93275
 (559) 723-3491

CC: Honorable Hallie Yacknin

PREVIOUS LETTER DATED MAY 25, 2009

197-1
 cont.

197-1
 cont.

Comment Letter I98

Comment Letter I98

August 8, 2009

Mr. Jensen Uchida
California Public Utilities Commission
Energy Division
Area 4-A
505 Van Ness Avenue
San Francisco, CA 94102-3214

Re: **Docket # A08-05-039 "San Joaquin Cross Valley Loop Transmission Project"**

Recent Newspaper Articles

Dear Mr. Uchida,

Here are a few of the newspaper articles that were written after the July 23, 2009 public comment on the DEIR at the Visalia Convention.

I thought these would be good for you to have and read. I know that more articles were written but the thought to send them your way only just occurred to me so I do not have the others to send.

198-1

Kind Regards,


Tony Calcagno
273 High Sierra Drive
Exeter, CA 93221
559-592-0100



July 24, 2009

Valley residents blast Edison's second power-line route

Farmers, experts across region bemoan loss of prime ag land

BY GERALD CARROLL
gcarroll@visalia.gannett.com

Three generations of the Hengst family from Woodlake don't want to see the end of a five-generation family farm.

"Do not put the poles through the 'Valley of the Sun' [Hengst Farms]," said 13-year-old Foster Hengst, referring to Southern California Edison's plans to build a new, high-capacity power-line route from its Big Creek transmission line northeast of Woodlake to the main power connection in Visalia.

Hengst's comments came Thursday night at a hearing on the first draft of an environmental impact report for the project a public-comment session attended by more than 700 people at the Visalia Convention Center.

Edison has for two years been trying to upgrade its electrical power connection between its Big Creek main power line in the Sierra foothills and Visalia, citing a desperate need to modernize Visalia's century-old system.

However, the new lines must cross over prime farmland, historic grounds or sensitive vernal pools, and they use huge 120- to 160-foot towers.

Property owners near the proposed paths of the new line have forcefully resisted, including those in attendance Thursday.

The focus was on a route favored by the California Public Utilities Commission, or PUC, which appeared to have less impact on the environment than Edison's preferred choice. The PUC's preferred route runs north of Woodlake, through Elderwood.

Edison's first choice, covering 181^{1/2}—2 miles, runs farther south and slices through Lemon Cove, Exeter and Farmersville on the way to Visalia.

The PUC will choose one of three proposed routes as soon as the EIR is finalized, said consultant Doug Cover, who coordinated the hearing.

"We have 50 speaking cards here, and we will try and give everyone a chance to comment," Cover said. "Written comments will carry equal weight."

Deadline for public comment is July 31.

Foster's grandfather, Bob Hengst, was blunt in his assessment of the PUC's suggested route, which skirts Woodlake to the north but cuts through the community of Elderwood and other valuable agricultural properties, he said.

"The devil himself could not have selected a more devastating path through the Hengst property,"

Comment Letter I98

Comment Letter I98

Bob Hengst said.

Bob Hengst said that irreplaceable infrastructure, such as a so-called wagon well that irrigates 230 acres, is in the path of the power lines and targeted for demolition. A wagon well has a central well with labor-intensive conduits extending out like the spokes of a wheel and can irrigate a large area.

"Wagon wells can't be built for any price," Bob Hengst said, as new worker safety rules now outlaw such wells.

David Hengst, Bob's son and Foster's dad, said the route effectively wipes out the otherwise successful Hengst fruit-farming business, where oranges, plums and pomegranates have been grown and harvested since the early 1900s.

"At \$200,000 an acre, we lose \$23 million in property value alone if these lines go in," said David Hengst. "Counting loss of prime farmland, another \$27 million in future income, and jobs, will disappear. It's a \$50 million loss and effectively ends Hengst Farms as a business."

Far-reaching effects

George McEwen, whose 60 acres of orange groves near Exeter could be clear-cut if the first proposal, Edison's preferred option, were to be implemented, said that the Hengsts' problems dwarf his own.

"It's hard to believe," said McEwen, whose 250-member organization, Protect Agriculture, Communities and the Environment, or PACE, has fought Edison on the power-line route for two years. "Clearly, nobody is out of the woods."

Lawona Icho Jasso of Selma, whose father, Felix Icho, was one of the patriarchs of the Wukchumni tribe buried near the path of Edison's preferred route, was one of an estimated 700 attendees who turned out for the hearing.

"The environmental [impact] report has to consider history and religious significance of the land," Jasso said. "That's why we're here."

Bob Blakely, director of industry relations for California Citrus Mutual, an insurance and support organization for Central Valley growers, stressed that the EIR process is far from complete.

"A lot can happen between now and when the EIR is final," said Blakely, who agreed with most attendees that a third alternative route that would run east of Oroshi and feed into the Visalia line, is the alternative that does the least damage to agriculture.

"The argument against that route is a vernal-pools area that can easily be mitigated," Blakely said.

A final decision on which route the PUC chooses for Edison will be made later in the fall, officials say.

Additional Facts

Farm, crop losses

Loss of farmland and walnut acreage with three of Southern California Edison's power-line pathway proposals for east Tulare County:

- Preferred route (from Lemon Cove through Exeter, Farmersville and into Visalia): 31.1 acres of farmland, 29 acres of walnuts.
- Alternative 2 (north of Woodlake into Visalia): 23.9 acres of farmland, 12 acres of walnuts.

- Alternative 3 (east of Oroshi into Visalia): 16.7 acres of farmland, 12 acres of walnuts. (Note: Area property owners and farmers indicate a much larger loss of farmland with all three proposals.)
Source: Southern California Edison and the California PUC



SCE Line Issue Sparks Loud Outcry

By Miles Shuper

A modified Alternative Route 3 simply makes good sense as the best site for Southern California Edison's controversial high voltage transmission line, the state Public Utilities Commission was loudly told during a public meeting on a draft Environmental Impact Report of the project.

Formation of a grassroots citizens' advisory committee to work with the PUC and its consultants to come up with a route with the least environmental, economic and social impacts was among the suggestions offered at



The SCE Rector substation in southeast Visalia is the destination of the power lines the power company wants to bring into the county. The session attended by about 700 persons.

There was no doubt that those

See POWER LINES page 13

POWER LINES from page 1

attending were adamant that Alternative Route 3 with modifications allowing the bypass of sensitive vernal pools, was the favored route. That route, through the Stone Corral Ecological Reserve, should be the top choice because it would be easy to mitigate, foes say. Route 3 locally is referred to as the Stokes Mountain route and portions of an existing power line run through the area.

That section is much better than Route 2 which the PUC earlier this year tabbed as the top choice. It runs north of Woodlake and Elderwood and bisects the Valley of the Sun, a historically significant agriculturally productive and cattle raising area. The Valley of the Sun was the scene of a huge festival attended by an estimated 10,000 persons in 1916 and the largest outdoor event west of the Mississippi.

The PUC's decision to put Route 2 at the top of the list was a victory of sorts for those who opposed Edison's favored Route 1, an 18-mile path through Lemon Cove, Exeter and Farmersville and into the Rector Substation in Visalia.

But members of PACE (Protect Agriculture, Communities and the Environment) successfully lobbied hard and strong against Route 1, and now are fighting just as hard to convince the PUC to select their authored modified Route 3. As anticipated, the PUC selection of Route 2 re-energized Elderwood and Woodlake property owners and residents who united when earlier hearings on all the routes were held. Route 2 opponents claim Route 3 could use existing rights of way for current lines which could be upgraded and have less overall impact.

James Gordon of Lemon Cove said, "We can recycle our cans and bottles. Why not recycle transmission lines?"

Several speakers said Edison's current transmission lines along Route 3 will have to be upgraded in the future, so it only makes sense to do it now.

Patricia Stevers, executive director of the Tulare County Farm Bureau, one of more than three dozen speakers at the Visalia Convention Center meeting last week, cited the number of area citizens and property owners at the meeting as an indication of how critical the final SCE selection is. She urged the formation of what she termed as "a community-based advisory" panel to work with the PUC, its staff, consultants and others. "Let us be a part of that decision," she said.

The draft EIR drew considerable criticism for its alleged shortcomings on the actual financial impact on farmland, water issues including wells,

pumps, irrigation systems and ground water impacts, health concerns, safety as well as land values.

According to the draft EIR, only 16 acres of farmland and 12 acres of walnuts would be lost in Route 3, while Route 2, the current choice, would mean the loss of 23.9 acres of farmland and 12 acres of walnuts. Edison's first choice, Route 1 - through Lemon Cove, Exeter, Farmersville and with a Highway 198 frontage route - would take 31.1 acres of farmland and 29 acres of walnuts out of production.

When the more than two-hour session ended around 9:30 p.m., it was clear dissatisfaction was the overwhelming consensus.

Bob Hengst, the eldest of three generations of Hengst to speak that night, made it clear that Route 2 should not be the PUC choice. "The devil himself could not have selected a more devastating path" through the family property.

And his explanation of the impact the tower and lines will have on the irrigation and wells was typical of concerns expressed by almost all the speakers. Drilling a productive well is always a gamble and to put wells out of service because they are in the path of power lines is just too big of a mistake.

Hengst outlined how a wagon-wheel well on family property, the source of irrigation for 230 acres in the path of the power line, would have to be abandoned if the lines were built.

Current safety regulations basically prohibit new wagon-wheel wells with a central vertical shaft and horizontal spokes with conduits or lines reaching out to other ground water sources, which greatly increase water production from one major well.

"Such wells," Hengst explained, are things of the past and to lose a productive one would be devastating.

David Hengst, Bob's son, said Route 2 would essentially wipe out much of the family's productive citrus, plum, pomegranate and other crop acreage which have been farmed for decades. At \$200,000 an acre in production and land value, the family would lose \$23 million in value and another \$27 million in future income and job losses, for an overall total loss of about \$50 million, essentially putting an end to the family business.

Bob Blakely, director of industry relations for California Citrus Mutual, called the draft EIR lacking on many fronts but said it is clear that Route 3, with the mitigation of avoiding the vernal pools area, is clearly the best choice.

No date for release of a final EIR report has been set but it is likely at least several months away, according to those close to the issue.

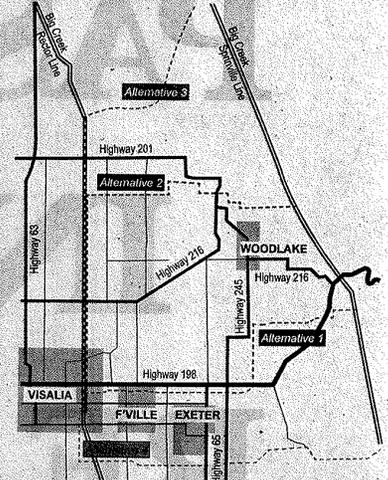
ROUTE 3:

Continued from page A1

San Joaquin Valley Cross Transmission Loop

SOURCE: California Public Utilities Commission

Comment Letter I98



Big Creek Hydroelectric System Historic District. While this is a similar story on other routes in the Draft EIR, the severity lessons as the paths head north. The Draft EIR seemed in favor of Alternative Route 2 which heads north on current SCE right-of-way, the crosses through the foothills near Elderwood, just north of Woodlake to the Big Creek 3-Springville transmission line.

Many residents from the Elderwood area along Route 2 spoke for the first time in years after being alerted by the Draft EIR findings. David and Linda Hengst spoke along with their son Foster and David's father Bob. Their family stands to lose millions if the lines are permitted to go through their farms. Linda said their daughter has property near the SCE Reactor Substation in Visalia and has not been able to sell their property because she was told the power lines depleted the land's worth.

Bob Hengst said that the power lines would require the moving of a pivotal well on their property.

"Without this well, our land will revert to dry land," said Hengst.

Water wells were one of the top discussion points of the evening as farmers, well drillers and various citrus association representatives spoke of the severity of having to move any well.

"Water levels are dropping and there is no guarantee we'd find water whether we moved a well 30 feet or 1,000 feet," said citrus grower Eric Melting.

Randy Redfield, an olive farmer in Elderwood said he drilled 24 times before he found water and that finding water in that area is growing difficult. Many farmers were also concerned about the construction process, the moving of wind machines and the loss of more agriculture.

"I don't know how one could take away so much from farmers and then later charge those farmers for that power when they have given up so much already," said farmer James Jordan.

At the end of every person's comments, route #3 was mentioned. While the Draft EIR stated that the vernal pools along route #3 in the Stone Corral Ecological Reserve could not be mitigated, many of the public disagreed.

George McEwen, a Lemoncove citrus grower and president of the group known as PACE (Protect Agriculture Communities Environment), said that various members of the group and its hired consultant, Lon House, met with the California Department of Fish and Game to discuss the issue. He

be mitigated.

Tulare County District 4 Supervisor Steve Worthley echoed this statement.

"The idea that this area cannot be mitigated is conjecture and not based on the facts," said Worthley. He added that there is an existing line that goes through the preserve now and that this line of 38 towers could be replaced with as little as eight new towers.

Greg Kirkpatrick, who conducted various focused biological surveys of the vernal pools in that area in the 1990s, also said the pools could be mitigated.

"There is no critical habitat on route #3 outside the Stone Corral area and the lines could be rerouted to where certain species are not present," said Kirkpatrick.

Those representing other public agencies also spoke.

"We share all the concerns that have been echoed tonight," said Tulare County Farm Bureau Executive Director Tricia Stever. "We'll submit more extensive comments along with those from the California Farm Bureau. We just ask that you let us be apart of this process no matter what route you choose."

Farmersville City Councilman Paul Boyer represented Farmersville residents pushing for the project to be moved to route #3.

The city has plans for a regional shopping center and an industrial park that will fall through if the Proposed Route is chosen.

"If you look at our citizens be a

this is the only place," said Boyer. "Twenty percent of our city is unemployed and most are farm workers. We need to have that tax base."

All comments from the evening as well as written comments will be added to the Final EIR, said to be published next month.

Leading the charge against SCE's proposed power line path is a group of local residents known as PACE. Formed initially to oppose only the proposed route, the group has since opposed every route except Route 3.

PACE is continuing its surge of support for Route 3 by asking residents to read the DEIR or at least the executive summary and prepare written comments. It can be downloaded from http://www.cpuc.ca.gov/Environment/info/csa/sjv/der_3s.html.

Copies are available at the Visalia and Woodlake library branches. Hard copies or CD copies may be requested by calling (415) 962-8409 or by email at sjv@csasoc.com. PACE has said it believes a hearing date to decide which route the CPUC will approve may be set for Aug. 31, 2009. For more information on PACE, visit www.pace-soc.com.

Written comments may be submitted to the CPUC by July 31. Comments can be sent by mail to Mr. Jensen Uchida, San Joaquin Valley Loop Transmission Project, c/o Environmental Science Associates, 225 Bush St. Ste. 1700, San Francisco, CA 94104.

Comment Letter I98

THE FOOTHILLS Sun-Gazette
Serving the foothill communities of Exeter, Farmersville, Hancho, Lemon Cove, Lindsay, Plainview, Strathmore, Three Rivers and Woodlake

VOL. 108, NO. 30 50 CENTS

www.thesungazette.com

A SAFE NIGHT
Exeter PD holds 4th annual Night Out against crime Aug. 4.
CITY Page A3

NO. 1 KILLER
Drowning is the No. 1 cause of death in Sequoia Nat'l Park.
CITY Page A3

Profile
STILL IN THE RACE
In 7th issue

WEDNESDAY, JULY 29, 2009

Public pressures CPUC to 'Go to Rte 3'

Locals add to Draft EIR, tell CPUC to choose Route #3 of SoCal Edison powerline project

By Mo Montgomery
The California Public Utilities Commission (CPUC) was not ready for the public response they received at the Draft EIR (Draft Environmental Impact) Hearing for the San Joaquin Cross Valley Loop Project last Thursday night in Visalia. After nearly doubling the size of

the room and having to add more chairs as people continued to flood in, representatives from the CPUC and its consulting firm announced they had received more than 50 comments cards.

No one can deny the public outcry the project has purposed, but this meeting between parties was different. Those who spoke had examined the Draft EIR thoroughly and were ready to share their knowledge and expertise on various items. From water wells to geological issues, division of parcels to focused bio-

logical surveys, residents from various communities spoke from different sides of the lines, but ultimately said the same thing: "Go to route #3."

The project proposes to build high-voltage power lines from its hydroelectric facilities in the Sierras, to its Reactor Substation southeast of Visalia. Edison's Proposed Route, or Route 1, would result in permanent removal of 31.1 acres of farmland (e.g. 16.1 acres of Prime Farmland, 0.7 acres of Farmland of Statewide Importance, and 14.3 acres

of Unique Farmland) between Lemoncove and Visalia and the towers would cut through the middle of the City of Farmersville's proposed regional shopping center just south of Highway 198. The project would also result in the conversion of farmland to nonagricultural uses in areas where height restrictions of crops within the right of way would cause walnut orchards to become unproductive as well as alterations to elements of the

See ROUTE 3 on page A7

"I don't know how one could take away so much from farmers and then later charge those farmers for that power when they have given up so much already."

- JAMES JORDAN, farmer

3.3 Transcript from Public Meeting

PM

PM

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

ENVIRONMENTAL IMPACT REPORT
FOR CALIFORNIA PUBLIC UTILITIES COMMISSION

IN RE:

SAN JOAQUIN CROSS VALLEY LOOP
220 KV TRANSMISSION LINE PROJECT

PUBLIC SPEAKING HEARING

THURSDAY, JULY 23, 2009
7:16 P.M.

Reported by: Victoria L. Thomas, CSR No. 12927

1
2
3
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Transcript of proceedings taken on Thursday,
July 23, 2009, 7:16 p.m., at Visalia Convention Center,
303 East Acequia, Visalia, California, before Victoria
s, CSR No. 12927.

1 I N D E X

2

3 Commencement of Public Speaking 4

4

5

6

7

8

9

10 EXHIBIT INDEX

11 (None offered.)

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 VISALIA, CALIFORNIA;

2 THURSDAY, JULY 23, 2009; 7:16 P.M.;

3 VISALIA CONVENTION CENTER

4

5

6 MR. COVER: I apologize in advance if I get your

7 name incorrectly. If you want to speak your name for

8 the court reporter, that would be an acceptable way of

9 correcting my mispronunciation.

10 So first up, Jim Sullins, and next is Foster

11 Hengst.

12 JIM SULLINS: Thank you very much.

13 I'm Jim Sullins, UC Coop Extension, County

14 Director, Tulare County, and I have a couple comments on

15 the adequacy of the EIR, and I would like to confine my

16 comments to that.

17 First I would like to talk about the prime

18 farmland space called the soils, particularly on our

19 Class 1 soils. And the EIR seems to, as does the CEQA

20 process, seems to ignore the fact that these are

21 irreplaceable resources and should be considered as an

22 important environmental resource.

23 Just as water and air as addressed, the

24 alternatives that have been proposed and have -- or will

25 have a direct and forever impact on several of our

PM-1

PM

PM

1 Class 1 soils that carve the peak part of our prime
 2 farmland. And I think that's not been adequately
 3 addressed. There are alternatives that do not impact
 4 Class 1 soils.

PM-1
 cont.

5 Air quality: The fact that there's no
 6 preference on the different alternatives on air quality,
 7 I find somewhat of a conundrum, whereas under the
 8 present Administration and the plans for -- under global
 9 climate change and air quality, our present Secretary of
 10 Agriculture of the US Department of Agriculture has
 11 pointed out that agriculture will be a key component if
 12 agriculture of the future will be part of sequestering.
 13 That's going to be a key part of agriculture in the
 14 future to meet our cap and trade that's being proposed.
 15 And these statements have been made, unfortunately. You
 16 see them.

PM-2

17 I'm not sure why that has not been
 18 considered in this Environmental Impact Report that you
 19 are -- that several of these alternatives are impacting
 20 the future of being able to continue to harvest.

21 They said there's no preference or impact on
 22 land use policy, yet Tulare County has a long history of
 23 land use policy and preferred prime farmland.

PM-3

24 I would like to refer to you the Rural
 25 Valley Lands Plan that's been in existence for the last

5

1 30 years that every project that we do in Tulare County,
 2 we try to avoid prime farmland. I do not see how this
 3 CEQA review could indicate that it is not opposed to
 4 that land use policy.

PM-3
 cont.

5 I also do not understand why the vernal
 6 pools were determined as being unmitigable in one of the
 7 alternatives, when statewide we have vernal pools that
 8 have been mitigated.

PM-4

9 The university of California Merced, for
 10 example, mitigated the vernal pool impacts they had in
 11 that project. If you -- if Mr. Cover would like to have
 12 reference to that, I can supply those.

13 Also, I'm addressing that there's not
 14 cumulative impacts on agriculture addressed in the CEQA
 15 process and in this environmental impact.

16 If we want to do a project in Tulare County,
 17 for example, our dairies, we have been sued by the
 18 Attorney General for not addressing cumulative impacts
 19 on air and water quality. I think CEQA should also
 20 require the environmental quality assessment should
 21 require cumulative impact assessments on agriculture.

PM-5

22 You're only looking at the direct impact.
 23 What about the indirect impact? Indirect impacts should
 24 be considered such as conversion to other uses,
 25 accelerating conversion to other uses under and around

6

1 these alternatives or the promotion of urban
 2 development. There are incremental impacts that should
 3 be considered as cumulative. That's all I have at this
 4 time. Thank you.

↑
 PM-5
 cont.
 ↓

5 MR. COVER: Thank you.

6 Foster Hengst, and next is David Hengst.

7 FOSTER HENGST: My name Foster Hengst, and these
 8 are my friends, Jacob and Ethan, and we are representing
 9 Christian Service Brigade.

10 My name is Foster Hengst. I am 13 years old
 11 and live in the community of Elderwood with my parents
 12 and sister. My dad and grandparents are here to speak
 13 today about how Route Number 2 and Number 6 will affect
 14 our family. I'm here to speak about how it will affect
 15 me and my friends who go to Foothill Bible Church. I
 16 want to thank you for the opportunity to tell you our
 17 story.

↑
 PM-6
 ↓

18 At Foothill Bible Church we have a group of
 19 young men that are a part of Christian Services Brigade.
 20 Brigade teaches leadership with responsibility and how
 21 God's truth applies to everyday life. We participate in
 22 many outdoor activities like skeet shooting, rock
 23 climbing, archery, nature walks, and picnics. We enjoy
 24 all these events on property in the Sentinel Butte
 25 Valley that has been in my family for six generations.

1 This Valley is underneath both of alternate
 2 Routes Number 2 and 6. Notice I said underneath the
 3 pole -- sorry. The pole line and high voltage wires
 4 will run right through the center of our beautiful
 5 valley. If one of these routes is selected, we will no
 6 longer be able to use this land for any of these
 7 activities.

↑
 PM-6
 cont.
 ↓

8 Christian Service Brigade will lose a
 9 valuable and truly unique place to learn and grow
 10 leadership. I will lose land that my family has kept
 11 and preserved for me and my children.

12 Please do not put the poles through the
 13 Valley of the Sun. Choose a route that doesn't run
 14 through the Sentinel Butte Valley. Thank you.

15 MR. COVER: Thank you.

16 Next up is David Hengst.

17 DAVID HENGST: Yes. Hello. My name is David
 18 Hengst. I'm here tonight representing my family and
 19 community's concerns.

20 Farming at the best of times is the fragile
 21 house of cards. Take out any one component, be it
 22 variable weather, good production, commodity prices,
 23 working capital, farmable acreage adequate water, et
 24 cetera, and the whole house will come tumbling down.

↑
 PM-7
 ↓

25 I am a fifth generation farmer in Elderwood.

1 My family and I have battled to keep this house of
 2 cards, which is Hengst Farms, profitable for over 100
 3 years. We have experienced many trials and losses as
 4 farming many times attempting to stay profitable.
 5 Luckily, each frugal generation that's been able to
 6 leave a little more farmland for the next, land that in
 7 increases in value and is really the only offset to the
 8 highs and mostly lows of farming.

9 Farmers are aware of all the things that can
 10 go wrong during each crop year and take them in stride,
 11 always hoping for a better next year. What we cannot
 12 digest are outside negative effects that are 100 percent
 13 manmade and have nothing to do with the weather or
 14 markets, pests, labor, or the cost of tea in China.

15 Alternative Routes 2 and 6 will not just
 16 have a negative effect on Hengst Farms; it will produce
 17 a devastating Class 5 tornado effect on Hengst Farms'
 18 house of cards.

19 My father Bob Hengst -- he was going before
 20 me, but he'll be coming next, and he'll speak on our
 21 well situation. But he spoke -- he's going to speak
 22 about Route 2 and the causes -- and the losses caused by
 23 that to our wells. One, wagon wheel well, which
 24 irrigates 230 acres of plums, oranges, and pomegranates,
 25 cannot be duplicated.

PM-7
cont.

1 So let me now speak to some of the negative
 2 monetary effects to Hengst Farms.

3 Over the next 50 years the loss of those 230
 4 acres at an average net return of \$2,000 per acre is \$23
 5 million. This last land on the Sentinel Butte property
 6 is so cut up by Routes 2 and 6 that no other use other
 7 than cattle grazing is possible there.

8 We have always tried to keep the country
 9 "country" and avoid selling property for houses.
 10 However, the loss of potential home sites and the
 11 freedom of future generations will have in selling them
 12 will cause the loss of \$27 million or more on that
 13 property. Together, we're looking at about a \$50
 14 million loss to my generation and the next.

15 We can legitimately count the cost to the
 16 next generation because my family has been farming a
 17 ranch in Elderwood since the early 1900s, and we are
 18 raising our kids to continue this tradition into the
 19 future.

20 Has Edison considered the deeper cost? Has
 21 the CPUC? Maybe Route 3 isn't the most expensive route.

22 Has anybody researched the danger to farm
 23 workers under the lines? Carrying ladders, operating
 24 forklifts, boom trucks, working on pumps, et cetera, do
 25 not seem like safe things to do.

PM-7
cont.

1 My uncle had me always keep the barbed wire
 2 grounded when he was building his fence under the
 3 existing Visalia Rector lines to avoid getting a
 4 powerful shock.

5 Will insurance companies continue to offer
 6 affordable liability insurance? Will banks offer good
 7 lines of credit to farms with obvious high risk?

8 How could the CPUC authorize Routes 1, 2, or
 9 6 through farmland when Edison itself has stated that
 10 permission must be granted to even park under the lines?

11 And what about the cost to our community?
 12 In the Old West when the bad guys robbed a bank, they
 13 were stealing from the whole town. Has anybody added up
 14 the Edison robbery ripple effect?

15 Every acre either temporarily or permanently
 16 lost to farming means that much less work available in
 17 the community, that much less money spent in the
 18 community, that much less tax dollars paid in the
 19 community, and that many more people who will either
 20 become a burden on the community or get fed up and leave
 21 California altogether.

22 Tulare County is already facing some of the
 23 highest unemployment in the country. Do we really need
 24 to force it higher? We only need to look to the West
 25 Side of the Valley to see the truth of how much

PM-7
cont.

1 devastation to a community can be caused by one poor
 2 decision.

3 I appreciate the CPUC allowing this meeting
 4 for additional input on alternative cross-Valley routes
 5 before they make their decision. I pray that they will
 6 not make a decision to go with Routes 2, 6, or 1, which
 7 will be nearly as devastating to our communities as the
 8 Delta smelt ruling was to the West Side. I am confident
 9 that wisdom will prevail and they will instead choose
 10 the Route 3-A, which avoids farmland, homes, and the
 11 vernal pools; vernal pools, by the way, that will need
 12 to be gotten around when future new lines are needed in
 13 the north.

14 Thank you for your thoughtful consideration,
 15 David Hengst, Elderwood lover.

16 MR. COVER: Linda Hengst, and next is Bob Hengst.

17 LINDA HENGST: I am his mother. My name is Linda
 18 Hengst, and I grew up west of Farmersville under the
 19 power lines just north of the Visalia Rector Subsection.
 20 Our daughter and her husband bought my childhood home
 21 from my mom, allowing her to stay in her home as long as
 22 she wanted to do so.

23 Bob and I have been married 45 years. I
 24 fell in love with the area after I fell in love with
 25 him. Never in my wildest dreams would I ever have

PM-7
cont.

PM-8

1 thought that our beautiful Elderwood property would be
 2 threatened by the same Edison lines from my childhood,
 3 especially since we are in PG&E territory.

4 The thought of Edison lines coming through
 5 one of the most pristine areas of our ranch is hard to
 6 stomach. This area has long been a source of pleasure
 7 for our family. Many church picnics have taken place
 8 there, as well as family gatherings at Easter time to
 9 celebrate our two sons' birthdays.

10 Native Americans from the past must have
 11 loved it as well, evidenced by their deep mortar
 12 grinding stones, petroglyph drawings on rocks, and the
 13 burial ground, which was confirmed by a dig from the
 14 College of the Sequoias.

15 A huge pageant called the Valley of the Sun
 16 also took place as thousands sat on the hillside and
 17 viewed it back in the 1920s. Bob's mom and dad were
 18 part of that unprecedented production. I can only
 19 imagine their sadness and anger over such a proposal if
 20 they were alive today.

21 We are one of many family farms that would
 22 lose valuable farmland. It is also land that would make
 23 beautiful home sites.

24 Our daughter's family, who currently live in
 25 my childhood home, just north of the Visalia Rector

PM-8
cont.

1 Substation would love to move back to the farm and build
 2 a home. They, too, never dreamed they might have to
 3 still look at power lines, as well as hear their buzz,
 4 as they drive under them each day. They have tried to
 5 sell their 30 acres, only to be told it could be sold as
 6 15 because there is no value to the acreage under the
 7 power lines.

8 My family once experienced the loss of a
 9 horse when one of these lines broke. Not long ago I was
 10 baby sitting when I heard a huge bang followed by
 11 electricity going out. These lines scare me, and I
 12 think that it would be proactive to replace as many
 13 lines as possible, making it safer for all living
 14 nearby, as they would be doing -- as they would be doing
 15 as part of proposed Route Number 3.

16 My father planted walnuts from the nut
 17 itself. And he was so proud of his orchards. I
 18 remember when Edison made him take the trees down that
 19 were under the lines. I don't think he ever got over
 20 the hurt of losing something he had worked so hard to
 21 produce.

22 Farming hasn't been easy for us in the past
 23 years, and, we, too, have worked hard to produce our
 24 crops. I don't want to see my family go through this
 25 again.

PM-8
cont.

1 By choosing the more northern Route 3, using
 2 the existing lines and going over Foothill cattle
 3 country, much valuable farmland can be preserved.

4 Thank you for listening.

5 MR. COVER: Bob Hengst, and next up is LaVerne
 6 Martelli.

7 BOB HENGST: Hello. I'm Bob Hengst.

8 Over a hundred years ago my maternal
 9 grandparents, purchased from Bertha's stepfather, Jason
 10 Berke, 30 acres north of Woodlake in the community now
 11 called Elderwood. On these 30 acres they planted
 12 citrus, and thus began a long-time family farming
 13 enterprise.

14 Around the same period, my paternal
 15 grandparents, Harold and Marie Hengst, homesteaded
 16 property in the North Fork and Three Rivers and started
 17 the cattle and hog enterprise.

18 Over the years more acreage was added in the
 19 Elderwood area. Various crops were grown, including
 20 citrus, grapes, cotton, beans, peas, pasture, oats,
 21 barley, corn, alfalfa, cattle, hogs, and sheep.

22 Some years after my parents Harold and Wilma
 23 were married, they sold their North Fork property and
 24 bought property from the Sentinel Butte Corporation.
 25 Part of this property was planted in the grapes, citrus,

PM-8
cont.

PM-9

1 and avocados, but it was later converted to range land
 2 for raising cattle.

3 This and other family property is what we
 4 are concerned about in the proposed Edison alternate 2
 5 and 6 Cross Valley Loop. In looking at the proposed
 6 route, the devil himself could not have chosen a more
 7 destructive route to the Hengst property.

8 First, the right-of-way starts on the east
 9 boundary of Sentinel Butte property and continues west
 10 for approximately three-quarters of a mile, then moves
 11 north over three-quarters of a mile, then west for an
 12 eighth of a mile.

13 The Hengst family property -- the next
 14 Hengst family property, the right-of-way crosses, starts
 15 west of Road 204, crosses over one-quarter mile of
 16 plums, taken out a 15 horsepower pump and well, as well
 17 as a hundred -- a quarter mile of eight-inch drain
 18 pipeline used to irrigate plums and other crops.

19 The line then crosses Millwood Drive and
 20 Cottonwood Creek and continue on Hengst property,
 21 crossing a wagon wheel well, a 100 horsepower pump, and
 22 a quarter-mile of ten-inch pipeline, the lateral or
 23 wagon wheel irrigation, 230 acres of plums, oranges, and
 24 pomegranates. It is the loss of this well that will
 25 effectively put Hengst Farms out of business.

PM-9
cont.

PM

PM

1 Now, let me explain a little bit how that
 2 wagon wheel is done. First, a 36-inch well is drilled
 3 about 100 feet down to decomposed granite. It is cased
 4 in concrete pipe, and then while a pump is pumping the
 5 water, a man is lowered into the well and jackhammers an
 6 eight-foot room from which he proceeds to drill many
 7 horizontal holes, with an air or hydraulic power drill,
 8 for several hundred feet. This increases the yield of
 9 the well.

10 This type of well can no longer be
 11 constructed at any price because of the ocean
 12 restrictions.

13 It is because my father had this well
 14 constructed in 1959 that we are now able to irrigate the
 15 230 acres previously mentioned. Without this well most
 16 of the acreage would revert to dry-land farming with a
 17 loss of income in the millions over the next 30 years or
 18 more.

19 The proposed lines proceeding west and then
 20 north along 194 making a turn near our 40 acres of
 21 oranges with full access needed. Facilitating this turn
 22 will require the removal of many orange trees. Access
 23 for those will need to be built on some of our property.

24 The sacrifice of three major pieces of
 25 Hengst property is asking a lot of our family to commit

PM-9
cont.

17

1 to this project. We are only a portion of the people
 2 affected by either proposed Route 1 or Alternate Route 2
 3 and Number 6.

4 I know there are many people with similar
 5 concerns. That is why already 3-A is so desirable.
 6 With a small jog around the Stone Corral of vernal
 7 pools, it would be the most environmentally friendly of
 8 any of the proposed routes, in addition to protecting
 9 many farming operations and businesses.

10 Thank you for listening.

11 MR. COVER: Thank you.

12 LaVerne Martelli, pass. Okay.

13 Darwin Hacobian, and next is Bob Blakely.

14 DARWIN HACOBIAN: My name is Darwin Hacobian. I'm
 15 from Elderwood, California. I would like to thank all
 16 my neighbors, my unhappy neighbors, that are here,
 17 several hundred of them tonight. I would like to bring
 18 the human aspect to this, and there's two portions that
 19 I would like to discuss, the economic loss and the human
 20 side of it.

21 The lattice work tower that ends up at 194,
 22 Road 194, sits on the property that my father purchased
 23 several years ago to build his retirement home to
 24 accommodate his elderly, older years.

25 Since the power lines have come in,

PM-9
cont.

PM-10

18

1 construction has not started, so he's ended up living in
 2 a travel trailer the last two years trying to figure out
 3 if he's going to build there or not, because that main
 4 tower sits exactly in the middle of that property. So
 5 ultimately, he's put everything in storage, living in a
 6 travel trailer, instead of building a house that will
 7 accommodate him in his older years, and waiting for when
 8 the good Lord takes him.

9 The other aspect is, I'm with Wise
 10 Engineering. We're an equipment company out of Visalia
 11 that has the privilege of working for just about every
 12 person that farms in both the Alternate 1 and
 13 Alternate 2 area.

14 With us, it just doesn't make any difference
 15 which line it is. I'm just wondering, with all the
 16 roads that we built, the pipes that we dig down, what
 17 the economic impact is going to be to us.

18 With construction being down, our biggest
 19 customers now are our brothers in the farming business.
 20 And with that construction happening both on Line 1 and
 21 Line 2, how is it going to effect the 40-some-odd
 22 employees of Wise Engineering. So I would encourage you
 23 to move the line up to Number 3. Thank you.

24 MR. COVER: Thank you.

25 Bob Blakely, and next up is Robert Edmiston.

PM-10
 cont.

1 BOB BLAKELY: Thank you.

2 My name is Bob Blakely. I'm director of
 3 industrial relations for California Citrus Mutual. Our
 4 offices are located at 512 North Kaweah Avenue, Exeter.

5 California Citrus Mutual is a voice of the
 6 California citrus industry. CCM is a voluntary grower
 7 association of over 2100 members, many of whom are
 8 family farmers in Tulare County and who stand to be
 9 impacted by this project.

10 I appreciate the time and effort that's gone
 11 into the preparation of this EIR, and I also appreciate
 12 the opportunity to comment on it tonight, the direct
 13 impact of the project will have -- the direct impact the
 14 project will have on citrus in Tulare County, and more
 15 broadly, on the California citrus industry.

16 CCM members will be negatively impacted by
 17 any of the alternatives currently proposed for this
 18 project. California, and specifically the Central
 19 Valley, is the world's largest producer of fresh citrus,
 20 supplying 80 percent of the fresh citrus produced in the
 21 United States.

22 Citrus production in California is primarily
 23 confined to a narrow band approximately ten miles wide,
 24 200 miles long, running along the foothills of the east
 25 side of the San Joaquin Valley. This is a unique

PM-11

1 microclimate of soil, water, and temperature, ideal for
2 citrus production that is not duplicated anywhere else
3 in California. It truly is an endangered industry.

4 And I would respectfully submit that the
5 people and bodies who are in power for providing for the
6 general welfare of our people, if they were to put as
7 much value on the agricultural land that provides the
8 food and fiber that provides their sustenance and food
9 on their table that they seemingly take for granted,
10 that place as much value on this irreplaceable land as
11 they do on a smelt or fairy shrimp or a Kit Fox, I
12 submit that Heaven and Earth would move before this
13 project would take out one acre of its agricultural
14 land. This project will eliminate land from citrus
15 production that cannot be replaced.

16 There's a provision in the Williamson Act
17 which may prohibit Edison from taking prime ag land
18 within the agricultural preserve. Section 5129 A states
19 it's the policy of the State to avoid, whenever
20 practical, the location of any Federal, State, or local
21 public improvement or any improvements of the public
22 utilities and the acquisition thereof in agricultural
23 preserves.

24 All three of the alternatives currently
25 being proposed for the San Joaquin Valley Loop

PM-11
cont.

1 transmission project will negatively impact prime
2 irrigated and primarily citrus land.

3 The California citrus impact analysis and
4 policy simulation conducted by Arizona State University
5 determined that the California citrus industry
6 represents nearly \$1.8 million of economic value to the
7 California economy and almost 15,000 jobs.

8 Additionally, the industry represents
9 825,000,000 of direct economic -- indirect economic
10 output and 1.63 million when all upstream supplies and
11 downstream retailers are included, employing a total of
12 nearly 25,000 direct and indirect workers.

13 The study looked at the impact of losing
14 1,000 acres of oranges in one year on the total
15 California economy and the orange subsector and found
16 the loss of economic benefit to California would be
17 substantial. So \$4.3 million had come out for the
18 industry and 7.4 million less activity for the state as
19 a whole.

20 Each 1,000 acres lost takes with it some 220
21 jobs and nearly \$1 million in annual State tax revenue.
22 The long-term effect will be many times this, and these
23 dollars figures do not include the loss of the State
24 value in the orchards or the environmentally beneficial
25 sequestration capacity of the citrus trees.

PM-11
cont.

1 CCM is opposed to taking of any citrus
 2 acreage for additional rights-of-ways where existing
 3 rights-of-ways may be utilized for the same end.

4 Additionally, when existing rights-of-ways
 5 may be utilized for this project, Southern Edison should
 6 work with growers to minimize the loss of production and
 7 the economic impact on affected growers corresponding
 8 the existing in the effect recently sustained economic
 9 losses due to the nerve mandate, which required growers
 10 to provide access and to remove trees in proximity of
 11 the existing towers.

12 In many cases this resulted in loss of
 13 trees, not in the existing right-of-way growers would
 14 feel the impact of the right-of-way, but be subjected to
 15 additional compound and loss as a result of this
 16 project.

17 As the old towers are removed, growers will
 18 be left with unplanted areas where productive trees were
 19 recently removed. This will require additional trees
 20 for the new, albeit fewer towers. Had Edison been more
 21 forward looking in the economic loss to growers, this
 22 public relations nightmare could have been avoided.

23 MR. COVER: Could you wrap up, please?

24 BOB BLAKELY: Yeah.

25 It would be the desire of California Citrus

PM-11
cont.

1 Mutual that this project be rejected, but alternatively,
 2 the PUC determines the project is essential, it will be
 3 a desire of the citrus industry that PUC require Edison
 4 to construct the transmission line, a water route, and
 5 minimize the taking of additional prime ag land and new
 6 right-of-way, but instead utilizing right-of-way
 7 wherever possible; and further, that the PUC should
 8 direct Edison or for the affected growers to return
 9 their establishment to within the right-of-way as
 10 possible and still comply with the existing ag
 11 requirements. Thank you.

12 MR. COVER: Thank you.

13 Robert Edmiston, and next is William Fox.

14 ROBERT EDMISTON: Thank you. I am a resident and
 15 a third-generation citrus grower in the Elderwood
 16 district near Edison's Alternate Route Number 2 and
 17 Alternate Route Number 6. And I have the following
 18 objections to their plans.

19 Water in the Elderwood district is a vital
 20 and very scarce commodity. As members of and director
 21 on the board of the Sentinel Butte Mutual Water Company,
 22 our ability and that of many others to farms solely
 23 depends on the availability of a dependable source of
 24 water.

25 The proposed Route Number 2 and 6 place our

PM-11
cont.

PM-12

1 water supply in great jeopardy. Route Number 2 removes
 2 one well vital to the district water supply and two
 3 private wells supplying water to a large acreage of
 4 citrus farmland. And you heard that from the Hengst
 5 family, the situation they'll be in.

6 Although Edison is supposed to replace these
 7 wells, there is absolutely no assurance that, due to the
 8 capricious nature of water strata in the area, that a
 9 well of equal volume and quality could be found. The
 10 tubular tower foundations are placed up to 60 feet deep.
 11 This could adversely affect the water table.

12 In this area, as the underground water
 13 strata tends to flow in narrow channels and in spotty
 14 locations, any interference with this fragile water
 15 supply could cause severe loss of productivity and the
 16 livelihood of the many.

17 The total amount of productive citrus land
 18 that would be removed from production for right-of-way
 19 is considerable and a large economic loss.

20 The Antelope Valley is a prime location
 21 blessed with natural beauty. The route of Alternate
 22 Number 2 crosses the Valley for approximately one and
 23 one-half miles during which five different changes in
 24 direction occur. It is at these points that a change to
 25 the last tower is required. The amount of last towers

PM-12
cont.

1 placed in the middle of this beautiful valley would
 2 constitute an appalling eyesore.

3 The amount of productive citrus land to be
 4 destroyed at each direction shift is considerable. This
 5 problem has not been addressed in the EIR.

6 The planned route through the Antelope
 7 Valley poses two problems. 1: A section of the line
 8 passes directly through the vernal pools. And I just
 9 received the aerial satellite picture of that.

10 Number 2: The Antelope Valley is known to
 11 the Yokol Indians as their sacred creation site. It is
 12 here that they believe they arose from the Earth. Their
 13 very vocal and obstructive actions must be taken into
 14 consideration.

15 The objective to Alternate Route 3 because
 16 of the vernal pools has been shown to be invalid, as the
 17 bypass was not investigated thoroughly enough by the
 18 EIR.

19 Unfortunately, the EIR does not address any
 20 of the critical issues in any way. Because of these
 21 critical circumstances, it cannot be stated strong
 22 enough that the northern route, Alternate Number 3, with
 23 modifications, be selected as the preferred route.

24 I thank you for your consideration.

25 MR. COVER: Thank you.

PM-12
cont.

1 William Fox and then Jack Allwardt.

2 WILLIAM FOX: My name is Dr. Bill Fox. I'm the

3 senior pastor of Foothill Bible Church in Elderwood, and

4 my responsibility is for the spiritual, mental, and

5 emotional welfare of a large percentage of those who are

6 affected by Route 2 and 6.

7 Having grown up and having been a farmer for

8 a number of years, I understand the risk involved in

9 farming, and I realize that the stress that's involved

10 in such a consideration as this is very great among

11 families.

12 It's also important to note that these

13 farmers who are affected are some of the best trained

14 and highly educated farmers that generations have seen.

15 Many of these who are affected are graduates of Cal Poly

16 San Luis Obispo, Fresno State, UC Davis Ag School, and

17 southern borderline farmers. They are highly efficient

18 farmers, and yet their income is threatened.

19 Just the day before yesterday, I received a

20 mailer from the US Department of Agriculture, and it

21 said this: In the past year the economy, inclement

22 weather, drought, and other factors have hurt many

23 farming operations around the country. These events

24 push some farmers to the emotional breaking point.

25 Watching their livelihood being threatened is difficult

PM-13



1 for farmers and ranchers, and especially those who care

2 about them.

3 And then the article goes on to cite the

4 National Suicide Prevention Hot Line and the number for

5 it.

6 My recommendation would be that the CPUC

7 take into consideration the emotional and ultimately,

8 therefore, the economic stress which would fall upon the

9 families who are affected by this. Thank you.

10 MR. COVER: Thank you.

11 Jack Allwardt, and Jose Martinez next.

12 JACK ALLWARDT: Hello. My name is Jack Allwardt,

13 and that last name is spelled A-l-l-w-a-r-d-t, for the

14 record.

15 I'm a retired industrial engineer living in

16 Exeter, and I am an Exeter City Council member. I'm

17 here as a citizen, a City official, and a member of

18 HASTE, to encourage the use of the Alternate Route 3

19 instead of Alternate Route 1 for the following reasons:

20 Route 1 will cut through 255 separate

21 parcels. Many of these are small citrus growers.

22 Taking a clear cut in an orchard or grove might just

23 render a small farm unfarmable. But one can't just

24 abandon an orchard or grove. Trees must be watered,

25 pesticides applied, or else bugs would find a safe haven

PM-13 cont.

PM-14



1 to launch an attack on adjacent farms. So if you can't
 2 farm it, you must remove it. Gee, more vacant land to
 3 deal with.

4 The climactic soil along the foothills north
 5 and south of Exeter is special and extremely attune to
 6 citrus production, and it would be a shame to lose even
 7 a small part of it.

8 Photosynthesis is the process by which
 9 plants absorb carbon dioxide from the air. The removal
 10 of citrus trees and the evergreen effect will result in
 11 the loss of biological equilibrium, causing an increase
 12 of carbon in the atmosphere. Remember the concerns
 13 about our carbon footprint?

14 Route 1 additionally will directly cut
 15 through the planned Farmersville industrial business and
 16 shopping areas. Farmersville is an extremely poor
 17 community and would benefit greatly from the increased
 18 tax base. Route 1 would drastically affect this town's
 19 growth and economic improvement.

20 Route 1 will cross State Route 65 just north
 21 of Exeter. This is our Gateway Drive, and these high
 22 tower power lines will be less than aesthetically
 23 appealing to folks who visit our area, as well as those
 24 of us who drive it daily.

25 And finally, it would be easier to mitigate



1 any ecological situations occurring on Route 3, which,
 2 by the way, only cuts through five individual parcels,
 3 mostly grazing land.

4 Thank you for your time.

5 MR. COVER: Thank you.

6 Jose Martinez, and next is Eric Meling.

7 JOSE MARTINEZ: Hello. My name is Jose Martinez.

8 I live in Woodlake, and I've lived there since 1976.

9 I'm a councilman for the City of Woodlake. Let it be
 10 known that I'm speaking here on my own behalf only as a
 11 concerned citizen.

12 Woodlake basically survives on its
 13 agricultural surroundings and is heavily dependent upon
 14 agricultural jobs. I have friends and know of many
 15 people in Woodlake who work in agricultural jobs or
 16 agricultural-related jobs. In some cases, both husband
 17 and wife both work in these agricultural jobs.

18 If you've got all these power lines
 19 repositioned in Route 2 ag land, this will permanently
 20 destroy much of livelihood, for both the workers and
 21 landowners. Then some will move away and find other
 22 types of ag jobs -- ag-related jobs elsewhere.

23 I am sure you can see the reason
 24 Californians are in deep economical trouble. Please pay
 25 attention to what ag economical troubles you would be



1 placing on this small town of ours. I assure you that
 2 the domino effect will affect many. So we urge you to
 3 please find your solution by moving your power lines to
 4 Route 3. Thank you.

↑
 PM-19
 cont.
 ↓

5 MR. COVER: Thank you.

6 Eric Meling, and looks like Rudy Garcia.

7 ERIC MELING: Eric Meling, a partner in Meling
 8 Brothers Citrus Ranches, third-generation citrus farmer
 9 for a family that goes back about 95 years in citrus
 10 farming.

11 Alternative Route 2, it crosses our property
 12 of about 70 acres, cuts it right in the middle, right
 13 next to the Hengst property where Bob left off. In that
 14 sense, we have some issues that we would like to address
 15 on the construction of these towers and the EIR report.

16 First, the spacing of, you know, the
 17 construction area of a hundred feet by a hundred feet,
 18 and the lines situation, we went on some issues of
 19 acreage that's being reported in the EIR report. There
 20 will be much more acreage taken out. We will not farm
 21 underneath the lines due to liability constrictions and
 22 stuff from that side. So I think your acreage report in
 23 the EIR report is probably incorrect.

↓
 PM-20
 ↓

24 And I think probably more apparent in all
 25 this is the water situation. You've heard Bob Hengst

↓
 PM-21
 ↓

1 talk about his wagon wheels wells. They're in that
 2 area. There's a hard area for water -- to find water.
 3 If you move wells, whether it be big wagon wheel wells
 4 or smaller wells, there's no guarantee at all that you
 5 will find water that can be moved ten feet, a thousand
 6 feet, or whatever. That situation is a major problem.

7 As you know, we're in a drought situation in
 8 the state right now. Water levels are dropping. Water
 9 levels on Route 2 are probably in worse shape than any
 10 of the other routes. That's not to say Route 1 doesn't
 11 have problems and Route 6 or Route 2. They all have
 12 problems in the ag property section. So I think the
 13 water thing is a huge issue.

14 In the Route 2 area, especially the Foothill
 15 community, how they find water is cracks in the rocks.
 16 As you go down -- as you go down with development of
 17 60-foot towers into the ground, you seal those off. You
 18 will not only affect farming population, citrus family
 19 farms, and any other farming crops, you also probably
 20 affect residential areas up there on, you know, small
 21 wells. And that can be downstream or various other
 22 areas.

23 4: In the citrus area we have lots of wind
 24 machines. As you construct the lines and we have to
 25 pull back from those lines 300 feet, I believe, it will

↑
 PM-21
 cont.
 ↓

↓
 PM-22
 ↓

1 be evident -- wind machine usually covers ten acres. In
 2 certain areas water is not there for the wintertime use,
 3 and colder areas, if you don't have a wind machine, you
 4 have a problem. We will back away from the property --
 5 of that property. So I think there's other areas that
 6 acreage is a big part.

7 I think -- I also represent a large citrus
 8 packing house in the Ivanhoe area as president of it.
 9 We've all gone through freezes, from '90, '91 to '98 to
 10 2007. In those freezes, you kind of see temporary job
 11 losses. You heard Bob Blakely talk earlier about job
 12 losses and some of that, how it affects.

13 You get temporary job losses as farmers, you
 14 always look forward to the, kind of the next season. As
 15 a runner of a packing house operation, it's part of the
 16 situation. You have to lay off people, you keep people,
 17 and you try to make it work. But I will tell you that
 18 when you get in this situation with losses of water,
 19 losses of production, this ripple effect will go far
 20 greater than any temporary 30 acres or 23 acres in the
 21 EIR report on Route 1 or 2.

22 Anyway, I appreciate the opportunity to
 23 speak tonight. Thank you very much.

24 MR. COVER: Thank you.

25 Rudy Garcia and then Bill Ferry.

PM-22
cont.

PM-23

1 RUDY GARCIA: Yes. My name is Rudy Garcia and I
 2 live in the small community of Woodlake. If you're not
 3 familiar with Woodlake, Woodlake is in one of the most
 4 beautiful parts of the country. But at the same time,
 5 if Route 2 and 6 is decided upon as mentioned, it will
 6 affect the community of Woodlake economically, as
 7 mentioned earlier. It is a farming community. And not
 8 only that, it would also affect the property value
 9 because these power lines are being considered south of
 10 Woodlake and north of Woodlake.

11 So again, please consider what you're going
 12 to do. If one of these alternative sites is decided
 13 upon, you will affect many, many people. So again, we
 14 do encourage Route Number 3.

15 MR. COVER: Thank you.

16 BILL FERRY: My name is Bill Ferry. I'm a fourth
 17 generation resident and farmer of Elderwood.

18 My great grandparents came to Woodlake
 19 around the turn of the century to help build the city
 20 streets of Woodlake. They soon purchased property in
 21 Elderwood and planted the ranches of oranges in 1913. I
 22 farm this ranch today. My forefathers chose to settle
 23 in this area for its pristine beauty. There are very
 24 few places left in California that have the intrinsic
 25 beauty of Elderwood.

PM-24

1 I have many concerns regarding the proposed
 2 project. First of all, the health issues involved in
 3 living and working in such close proximity to power
 4 lines.

5 The water availability in the Elderwood
 6 Valley is unique. There are three aquifers in this
 7 Valley, and the first is between 30 to 40 feet in depth.
 8 The second is located 30 to 60 feet, and the third
 9 between 90 and 100 feet.

10 The aquifers are underground rivers, they
 11 have in the flow on different directions. Finding water
 12 in this Valley is risky and costly. You can have good
 13 producing well in one spot, and move a few feet in
 14 another direction and have a dry hole. If growers are
 15 forced to move their wells, there are no guarantees that
 16 they will obtain similar water.

17 I have a great concern that the tower of
 18 foundations may disrupt this current -- the current
 19 aquifer structure and cause problems with our neighbors
 20 that are not even close to the power lines. This has
 21 not been addressed by the current EIR.

22 The EIR does not address the impact on
 23 family farms, on their employees from the reduced
 24 profitability on this drought-made loss of jobs.

25 The reduction in the real estate values will



PM-25

1 be insurmountable. We will never be able to sell our
 2 properties for what they were once worth, nor the
 3 properties be utilized in a profitable manner.

4 Route 3 is the best alternative. A better
 5 route for the routes. Route 3 does not disrupt as much
 6 agricultural property, livelihood, or homes. The
 7 existing right-of-way through the Stone Ecological
 8 Preserve will need to be updated or repaired at sometime
 9 in the future. It might as well be addressed now.

10 Thank you.

11 MR. COVER: Thank you.

12 Next one -- James Jordan is up next, and
 13 then Doug Carman.

14 JAMES JORDAN: Good evening. Thank you. My name
 15 is James Jordan. I am married. I have two daughters.
 16 We live and farm in the Route 2 and Route 6 areas. I
 17 want to thank you for taking the time to hear our
 18 comments.

19 As I read the draft EIR, I found many
 20 explanations of how things are to be done, what type of
 21 equipment is to be used, what it's supposed to look like
 22 when it's done, but I did not see any mention of how
 23 people are supposed to operate their farms during the
 24 construction or how they will be able to farm after the
 25 lines are completed. In other words, the EIR fails to



PM-25 cont.



PM-26

1 identify, address, or apply mitigation measures to
2 offset impacts to farmland or farming practices.

3 The EIR also fails to identify or address
4 any mitigation measures to offset the impacts to
5 hydrology and water quality.

6 As I stated before, I make my living from
7 the land. I'm a farmer. And in order to farm, you have
8 to have land and water. Both of these items may not be
9 available after these lines are placed.

10 I wrote some notes here. EIR Page 8-12, 13.
11 Mitigation impact, Page 4.2.4, 4.2-5.

12 Sure, SCE will be able to pay some growers
13 some money or some amount of money for their land, but
14 growers will not be able to reside or invest that money
15 back into the community.

16 We here in the Valley are dependent on one
17 another. The fertilizer company, the trucking business,
18 the propane guy, these are all parts of farming. And
19 that's what the Valley income runs on. Agriculture.

20 If you doubt that, look at the small farming
21 communities who are suffering because no water is coming
22 or because maybe a farming operation went out of
23 business.

24 I tell you, it's hard to understand how
25 placing power lines on prime farmland helps the public

PM-26
cont.

1 or helps the Valley communities. Every acre lost to the
2 power lines is an acre that could be putting money back
3 into the local community.

4 It seems unjust to ask a farmer to give up
5 his farmlands that drives our economy, and then later
6 charge that same farmer for the power he's already paid
7 for by giving up the right to make income from that
8 land.

9 This is why I'm asking you, the SCE, to
10 strongly consider Route 3, which has the least amount of
11 farmland impacted. That's on Page 5-4 in Alternate 3.
12 Thank you.

13 MR. COVER: Thank you.

14 Doug Carman, and next is David Bean.

15 DOUG CARMAN: Good evening. I'm Doug Carman. I'm
16 vice president of farming, Paramount Citrus. My office
17 is in Delano. And I'm here to represent Paramount
18 Citrus, which has farming and packing operations in the
19 area affected by the proposed Cross Valley Loop.

20 We have citrus orchards that would be
21 adversely affected by Alternatives 1, 2, and 6, but
22 would be particularly affected by Alternative 2.

23 For the reasons that I have outlined, we
24 urge the PUC to find a way to utilize some version of
25 Alternative 3 that minimizes the habitat impacts and

PM-26
cont.

PM-27

1 avoids building miles of new high-tension lines through
2 extremely productive agricultural land.

3 Paramount Citrus has operations from Madera
4 to Ventura, but the majority of our orchards and our
5 fruit packing operations are in the area from Visalia to
6 Delano along the east side of the Valley.

7 Paramount Citrus is one of the largest
8 employers in this area. We are extremely proud of our
9 commitment to our employees and the communities where we
10 grow and pack our fruit.

11 Charitable contributions and scholarships
12 are important ways that Paramount Citrus and its
13 employees participate and support Valley communities.
14 In addition, our citrus groves and packing facilities
15 produce jobs for our own employees and for all of the
16 local vendors who we hire for much of the work necessary
17 for our operations.

18 We're extremely concerned that the adverse
19 effects of the three alternative Valley loop routes have
20 been severely underestimated by the draft Environmental
21 Impact Report. And for illustration, I will focus on
22 the direct financial impacts of Alternative Route 2.
23 However, the other proposed routes have similar adverse
24 impacts, both on our operations and on the operations of
25 our neighbors.

PM-27
cont.

1 According to the draft EIR, Paramount Citrus
2 would lose an estimated 4.39 acres of trees during the
3 construction process. When we studied the route plan,
4 however, we calculated 17 acres will actually become
5 unfarmable. In addition, we'll lose a reservoir, a till
6 water pump, and water well.

7 In particular, the EIR states that citrus
8 can be replanted and farmed under the high voltage
9 wires. However, that is not practical, feasible, or
10 safe for our workers and contractors due to intensive
11 operations required to maintain, irrigate, and harvest
12 the orchards.

13 The EIR states on Page 2-40 that citrus
14 trees can be planted back under the power lines and
15 maintained at 15 feet, but fails to account for farming
16 operations required under these lines.

17 For example, we can't safely operate our
18 mechanical toppers to prune our trees, place the nets to
19 prevent bees from pollinating our seedless Clementine
20 fruit, operate our wind machines necessary for frost
21 protection, or even pick the fruit due to the height of
22 the high voltage lines.

23 The high voltage lines also interfere with
24 the irrigation processes. According to the EIR, all
25 intervenal pipe lines must have at least 36 inches of

PM-28

PM-29

PM-30

1 dirt. Obviously, irrigation lines have to come to the
2 surface to irrigate trees.

3 The economic cost of this 17-acre loss is
4 significant. The economic loss includes the fair market
5 value of the land that will be taken out of production,
6 the value of the existing trees that must be removed,
7 the cost to remove the trees, relocate the well or
8 reservoir, a pump, and a couple of wind machines.

9 This total does not take into account lost
10 revenue due to the loss of this prime agricultural land
11 to the very possibility of significant and permanent
12 adverse impacts on our groundwater in the amount of
13 water available for a relocated well.

14 Perhaps more important than our individual
15 loss is the lost annual income to the communities from
16 which Paramount Citrus farming operations exist.

17 Annual cost of labor, materials, and
18 supplies represent money that goes into the community
19 from our farming operations each year. Just from the 17
20 acres that we will lose in Route 2, we estimate a total
21 of \$30,800 spent on this year's farming cost alone.
22 That equates to more than \$2200 per acre that is not
23 returned to the community for every acre of citrus that
24 is lost due to this project.

25 The general rule of thumb to calculate the

PM-30
cont.

PM-31

1 economic impact that money spent in the community is the
2 different uses and total economic benefits of three
3 times the original dollar spent, or in this instance,
4 about \$162,000 annually. This figure does not include
5 the revenue generated by harvesting, hauling, or
6 packing, and sales, which more than double this amount.

7 MR. COVER: Could you wrap up, please?

8 DOUG CARMAN: Sure.

9 MR. COVER: Thank you.

10 DOUG CARMAN: Remember, these impacts are merely
11 the ones to our farm, so particular impacts will be
12 generated all along the land and to the communities
13 affected by Routes 1, 2, and 6.

14 In conclusion, because the draft EIR failed
15 to take into consideration the cultural farming
16 practices, the number of significantly impacted
17 agricultural acreage along Routes 1, 2, and 6 have been
18 grossly underestimated.

19 For these reasons we believe the Alternative
20 Route 3 is the only route that makes sense, and we
21 encourage the PUC to adopt some version of that route
22 that minimizes the impacts as proposed by some of the
23 other speakers. Thank you.

24 MR. COVER: Thank you.

25 David Bean, and then Randy Redfell -- or

PM-31
cont.

1 Redfield.

2 DAVID BEAN: Good evening. I'm David Bean. I'm a
3 principal hydrogeologist with AME Geometrics in Fresno,
4 and I'm a professional geologist and certified
5 hydrogeologist in California. I've been practicing
6 hydrogeology in the San Joaquin Valley for about 22
7 years.

8 In 2008 we conducted a survey of groundwater
9 resources in the vicinity of project Alternatives 2 and
10 6 on behalf of Paramount Citrus. We used ground water
11 elevation data collected by the Department of Resources
12 and USGS to prepare hydrographs and extensive surface
13 maps from 1980 to 2007 and for over 60 wells in the
14 area.

15 The data shows that ground water general
16 flows east to west, which is no surprise to people from
17 the Foothill area, such as Cottonwood Creek and Antelope
18 Valley, also known as Sentinel Butte, to the Valley
19 trough west of Highway 99. This ground work is flowing
20 through Alluvial and trap through bedrock aquifers
21 covered by Alluvial aquifer.

22 A combination of precipitation data, stream
23 flow data, and border low data indicates that the
24 Elderwood Dutch Colony area -- well, Cottonwood Creek is
25 a significant recharge area for this portion of the

PM-32

1 Valley.

2 The data showed that this border moves from
3 the east side west and even past Cobin Mountain. So
4 it's an important recharge source for many local wells
5 and many square miles of productive farmland.

6 The data also showed that groundwater
7 resources range from 10 to 80 feet depending on the
8 year, low ground surface in the Elderwood Dutch Colony
9 area. As recently as 2007, the border was between 10
10 and 40 feet below grade, depending on your location.

11 Directly below market section is not very
12 extensive, it's diverse sources of recharge. To the
13 contrary, the data indicate that the low recharge area
14 because of the -- the local effects are so quickly
15 transmitted from one point to another.

16 Seasonal variations in groundwater declined
17 during drought periods, recovering during wet periods,
18 indicate that local recharge in the Antelope Valley and
19 Cottonwood Creek area are very important to local
20 watering system.

21 As a result, the system can be impaired by
22 even small changes in the available land for recharge.
23 And it can have a significant impact.

24 After my review of the EIR, I believe it's
25 deficient and fails to adequately address potential

PM-32
cont.

1 ground work resulting from installation of power poles,
 2 surface roads, service area pads along the east line of
 3 Alternatives 2 and 6 in the Elderwood Dutch Colony area
 4 and in the Sentinel Butte Antelope Valley area.

5 Specifically, the EIR, Page 3, I-2, and
 6 indicates that some permanent roads would be covering
 7 about 28 acres of land over the entire lane.

8 Approximately five acres of new road service
 9 appear to be in the recharge area of Elderwood Dutch
 10 Colony and Sentinel Butte, Antelope Valley. I'm
 11 assuming the five acres are going to be graded, impacted
 12 to become roads, so they're going to become less
 13 permeable, and this will have an adverse impact on
 14 recharge.

15 The result of where we ran off during rain
 16 events and maybe you lost the aquifer. In addition,
 17 there's some nine acre that are, quote, "permanently
 18 disturbed." I am not really sure what that means, but I
 19 am going to go with the idea that it means it's also
 20 been cleared, graded, impacted. So it's going to be,
 21 again, less permeable.

22 The EIR, Pages 220 to 233, described poles,
 23 tower, roads required for the project. The new
 24 foundation for the tubular poles will be 6 to 10 feet in
 25 diameter and 20 to 60 feet deep. This is going to --

PM-32
cont.

1 when they put this big pole in there and cement it up,
 2 it's going to remove a good portion of Alluvial. And if
 3 it gets down into bedrock, there's a good chance that
 4 you're going to be hitting up fracture within the
 5 bedrock, and this could have very negative repercussions
 6 for somebody quite a distance away from where this pole
 7 might be located.

8 As others indicated, it's pretty hit and
 9 miss where you drill into fractures, and if you're
 10 lucky, you get good yield; if you're not, you've got
 11 drywall.

12 As a result, there is a significant risk
 13 that there will be permanent reduction in available
 14 groundwater to users in the vicinity and possibly
 15 elsewhere further away from the Valley.

16 Since I don't have much time, I'm not going
 17 to go into a lot more detail. I'll just say that, while
 18 the individual same structure may not be typical,
 19 groundwater may be less than significant as indicated in
 20 the EIR, cumulative impacts of roads and multiple pads
 21 and multiple structures cannot be so easily dismissed.

22 The EIR does not adequately address the
 23 cumulative impact of Projects 2 and 6 on groundwater
 24 resources -- and resources, and further investigation is
 25 needed.

PM-32
cont.

1 And based on what I've said -- or what I've
 2 seen from others and what I'm hearing today, it sounds
 3 like Alternative 3 really should be looked at a lot
 4 harder. Thank you.

5 MR. COVER: Thank you.

6 RANDY REDFIELD: Good evening. My name is Randy
 7 Redfield.

8 MR. COVER: Next up was Karen Redfield.

9 RANDY REDFIELD: We are going to pass on Karen. I
 10 am going summarize and keep it short.

11 MR. COVER: Okay.

12 RANDY REDFIELD: My name is Randy Redfield, and I
 13 am a resident and farmer on 40 acres of olives on lands
 14 adjacent to Routes 2 and 6 in the Antelope Valley.

15 And after I looked at the Environmental
 16 Impact Report, I discovered three biological and
 17 cultural factors that I feel were not really addressed.

18 One of those factors is the fact about
 19 water. And I'm just going to -- instead of going
 20 through all the comments I had, I just want to say this:

21 In that area finding water is extremely
 22 difficult. I was trying to think of a good analogy, and
 23 it's not great, but it kind of reminds me of burying a
 24 hose, a 50-foot or a 100-foot hose, under 60 to 80 feet
 25 of dirt and rock and -- underneath one acre of land and

PM-32
cont.

PM-33

1 saying, go out there and try and find that. Drill down
 2 and try and find it.

3 I drilled 24 times looking for water. I got
 4 lucky a couple of times. I know how hard it is to find
 5 water in that area. It's extremely difficult.

6 So when we ask a farmer or a rancher to give
 7 up a well and we say, well, we'll drill you a new one,
 8 it means nothing. It means absolutely nothing. Water
 9 is sacred there, and it's extremely hard to find.

10 The other point I wanted to make with water
 11 was that, a lot of the locals that have been around a
 12 long time know also what it's like to try and improve a
 13 well in that area. Drilling a well deeper in that area
 14 often results in losing your water capacity and maybe
 15 losing a well completely, because you break down through
 16 a piece of hard rock or you get into another fissure,
 17 and that water just finds another direction that it can
 18 move easier. And you've lost -- some people downstream,
 19 so to speak, have lost, too. So water is a huge, huge
 20 issue. I know many, many people are interested.

21 The second point that I wanted to comment on
 22 that was not addressed in the Environmental Impact
 23 Report had to do with the historic event that took place
 24 in 1926 on the historic Sentinel Butte Ranch.

25 There was a pageant they had there. It was

PM-33
cont.

1 an outdoor pageant called Valley of the Sun. Now, an
 2 outdoor pageant doesn't sound like much to most of us,
 3 but in that time and in that day it was a huge event for
 4 this area and for this state. Only 1,000 people lived
 5 in Woodlake at that time. Only 10,000 people lived in
 6 Visalia; yet we have over 10,000 people in the Antelope
 7 Valley in this same place that we've been testifying so
 8 much about tonight.

9 There was a beautiful outdoor amphitheater.
 10 People came from all over the state to this event, and
 11 they even made news reels of this event and showed them
 12 in theaters all across the United States. Millions of
 13 people saw these news reels about the biggest outdoor
 14 event that happened west of the Mississippi River. And
 15 that happened right there in the Sentinel Butte area.
 16 So we see that area as being a very, very important
 17 historical area.

18 We have lots of reason why we want to
 19 protect it, but that is one of the reasons. And those
 20 power lines are going directly, directly through the
 21 center of that amphitheater that hosted this event. So
 22 we're very concerned about that.

23 The third point I wanted to make has to do
 24 with the Native Americans and the history that took
 25 place in that Valley. And as was mentioned earlier this

PM-33
cont.

1 evening, this is the creation site. These power lines
 2 are running right through the Yokol Indian -- a local
 3 group of Indians that live there, their creation site,
 4 where they say all creations sprang forth. And we're
 5 taking those lines right through those areas.

6 There are many, many different pieces of
 7 evidence from holy pictographs and paintings, of course,
 8 the grinding stones, artifacts of jewelry and weapons
 9 and day-to-day possessions, and interesting also the
 10 sacred Indian burial grounds.

11 In 1961 the College of Sequoias did an
 12 archeological survey there, and they were able to
 13 unearth the grave of historic Native Americans who were
 14 living. They documented this and it's on record in --
 15 at the College of Sequoia.

16 Many, many of us see what's happening in
 17 this area culturally and historically as is very
 18 devastating, and we feel that that needs to be taken
 19 into consideration and hope that you will listen to that
 20 tonight.

21 All in all, I'd just like to say, I've
 22 listened to many of the different folks testify, and I
 23 have been very impressed with the comments that they
 24 have made. I believe after lots of discussion and
 25 investigation that this Route 3 with the alternative

PM-33
cont.

1 bend around the vernal pools certainly seems like the
 2 path of least resistance in terms of impact on the
 3 environment and on people, on agriculture, and we're
 4 very hopeful that you would seriously consider that
 5 route.

6 Thank you very much.

7 MR. COVER: Thank you.

8 Del Strange is next and then Tom Logan.

9 DEL STRANGE: Good evening. My name is Del
 10 Strange. Thank you for allowing me the opportunity to
 11 comment on this project.

12 It is understood and agreed upon by -- that
 13 the Cross Valley Loop transmission line is necessary to
 14 increase transmission capacity in the region, while
 15 continuing to provide safe and reliable electrical
 16 service, and that any impacts on the project be
 17 minimized both on the environment and on human lives.

18 Consequently, we must all strive to identify
 19 the project alternative, including the proposed project
 20 that best meets these criteria.

21 Although the EIR identifies Alternative 2 as
 22 the environmentally superior alternative, in reality,
 23 under CEQA, the true environmentally superior
 24 alternative is Alternative 3A, based on the following
 25 facts, and there are 16:

↑
 PM-33
 cont.
 ↓

↑
 PM-34
 ↓

1 It meets all the project's objectives
 2 identified by Southern California Edison and is
 3 feasible. It meets project needs with the least
 4 environmental impact of all available options. It can
 5 be slightly modified to avoid or mitigate any impact to
 6 the northern clay pan vernal pool habitat or the
 7 jurisdictional waters of the United States and waters of
 8 the State, including drainages and seasonal wet beds.

9 It is the option with the least impact on
 10 human lives, wildlife, and plant life, including loss of
 11 High Valley productive agricultural land, permanent loss
 12 of 16.7 acres of farmland versus 31.1 acres for the
 13 proposed project, 30.7 acres for Alternative 6, and 23.9
 14 acres for Alternative 2.

15 The loss of prime farmland, there is the
 16 permanent loss of 6.6 acres of prime land versus 16.1
 17 acres with the proposed project, 9.5 acres for
 18 Alternative 2, and 6.7 acres for Alternative 6.

19 Scenic views and scenic highways. Avoidance
 20 of major impacts on the City of Farmersville, its
 21 people, and the Farmersville general plan. Displacement
 22 of existing housing, displacement of people,
 23 demographics, future population and housing. All of
 24 these things, Alternative 3A is superior.

25 Construction or expansion of recreational

↑
 PM-34
 cont.
 ↓

1 facilities. The effects -- it affects fewer citrus and
 2 walnut orchards. Irrigation and domestic well,
 3 abandonment and relocation. Infringement upon a major
 4 flood plane. Electric shock from induced current.
 5 Noise impacts from operation of transmission lines and
 6 corona discharge effects or what they call Lapome.
 7 And environmental impacts. Use of existing
 8 Southern California Edison right-of-way. It uses 14.6
 9 miles of existing right-of-way versus only 10.8 miles
 10 for Alternative 2 and 8.1 miles for Alternative 6, and
 11 just 1.1 mile for the proposed project.
 12 And finally, the overall cumulative impacts
 13 are far less for Alternative 3A than all other
 14 alternatives that have been considered.
 15 Consequently, for all these reasons,
 16 Alternative 3A is the environmentally superior
 17 alternative under CEQA, hands down, and should be
 18 declared the project of choice by the California Public
 19 Utilities Commission. Of course, a slight realignment
 20 modification to avoid the vernal pool habitat would be
 21 necessary.
 22 I respectfully urge the CPUC to take action
 23 to select Alternative 3A so that Southern California
 24 Edison can stay on schedule with the project and
 25 continue to provide safe and reliable electric service

PM-34
cont.

1 to the region.
 2 Thank you for the opportunity to comment.
 3 MR. COVER: Thank you.
 4 Tom Logan and then Doug Phillips.
 5 TOM LOGAN: I'm Tom Logan. I farm in the Exeter
 6 area around where you have Route 1 going through there,
 7 and I want to hit on a couple of things on.
 8 If it goes through on Route 1, I will
 9 probably lose a well. At least a well will not be able
 10 to be serviced, according to my well service people,
 11 because they won't pull the pipes out. It will be too
 12 close to the power lines. So I can lose it.
 13 And the question is, where do I go to get
 14 water, which has been addressed by a lot of people. And
 15 certainly in Elderwood, it's probably even more critical
 16 than it is for me. So that's a big thing for me. And
 17 besides that, who's going to pay to remove that well,
 18 and where are they going to find water? I doubt very
 19 much if Edison will. I really do.
 20 The other thing is the legal ramifications,
 21 if I have people going through the property underneath
 22 these lines, is Edison going to represent me legally?
 23 Are they going to mitigate the damages for me? No.
 24 When pigs fly, they might, but they won't.
 25 Edison is not a company to be trusted. And

PM-34
cont.

PM-35

PM-36

1 I can tell you that from personal experiences. I used
 2 to do some work as a subcontractor for Edison a number
 3 of years ago, and I can remember a meeting when one of
 4 the managers there said, I want to make it real plain.
 5 We don't make mistakes, period. But they do. They
 6 truly do.

↑
 PM-36
 cont.
 ↓

7 Now, the other thing I want to bring up is,
 8 I want to take exception on -- it's on your Chart 15, I
 9 guess it is here. It has significant unmitigable
 10 impacts, biological Alternative 3. That's referring to
 11 the vernal pools.

↓
 PM-37
 ↓

12 But I understand that Fish and Game,
 13 California Fish and Game has been up there and said, oh,
 14 no, you can get around that easily. And I don't know.
 15 I've been hearing about Route 3A tonight. Maybe that's
 16 what the alternative route is. I don't really know.

↓
 PM-38
 ↓

17 I do have a report that I do want to give to
 18 you. And I'm thinking maybe we ought to just take a
 19 vote tonight and see if Route 3 goes to win.

20 (Round of applause.)

21 But this is my wife's birthday, and she
 22 said, "Where are you taking me for dinner?" And said,
 23 "I have to go to the PACE meeting." And I said,
 24 "Darling, I'll make it up to you."

25 MR. COVER: Thank you.

1 Doug Phillips is next and then John Pehrson.
 2 DOUG PHILLIPS: Okay. I'm Doug Phillips. Thank
 3 you for the opportunity. I'm representing Sentinel
 4 Butte Mutual Water Company and also Phillips Farms. I'm
 5 owner of that, and I'm president of the water company.

6 The proposed projects, the impacts on my
 7 property on Route 1, not directly, but close by, and
 8 they impact my own property and the Sentinel Butte Water
 9 Company's properties on Number 2 and 6. And I also have
 10 property that's near the famous Vernal Pools on Route 3.
 11 But it's not on, unfortunately.

12 Sentinel Butte Mutual Water Company, located
 13 near Woodlake in Elderwood, has provided superior
 14 quantities and quality of water for this area for the
 15 past century. It was starting to supply water in 1898.

16 And the proposed Route Numbers 2 and 6 will
 17 cross multiple waterlines and right-of-ways for us and
 18 will travel directly over one of the best-producing
 19 water wells in our system and in that area. And it's --
 20 we've got some of those doggone water -- wagon wheel
 21 wells that everybody's been talking about.

22 And Sentinel Butte Water Company has
 23 stretched its limits during these drought years, and the
 24 elimination of any well is going to jeopardize our
 25 entire company in the time that we just cannot replace

↓
 PM-39
 ↓

1 this water easily.

2 The wells, they've been placed in the best
3 areas already for maximum yield, and if we're forced to
4 move these wells, there's really no guarantee that we're
5 going to obtain any water or any similar quantity of
6 water. And you just can't simply move your well or
7 drill a well nearby and expect to get the similar
8 quantity of water. If that was true, they would have
9 already done it.

10 These people, the old timers were up there
11 years ago, and they witted for water and drilled wells
12 here and there by chance, and they found all the water
13 there is. So you can't come over our well and tell us
14 to move it and expect us to go over and find any
15 replacement. So therefore, we're most likely not going
16 to replace that water.

17 And so it's a lot more than just the loss of
18 the water and the cost of the easement strip that they
19 may try to purchase. They're going to have to purchase
20 a heck of a lot more property if they come in here and
21 make us lose our water.

22 So I think Edison is going to need to buy a
23 lot more property than they thought, and they're going
24 to have to recalculate the cost of Routes 2 and 6. I
25 think they're incorrect.

PM-39
cont.

1 Also, our waterlines criss-cross. In some
2 instances, they run parallel to proposed power lines,
3 and relocation of these lines hasn't been properly
4 addressed in the EIR.

5 The agriculture and irrigation distribution
6 mitigation measures referenced in the EIR are erroneous
7 and incomplete. I think you also have this
8 environmentally superior alternative. I guess that's
9 the other ESA. And I think the unmitigable impacts are
10 incorrect, and the farmland acreage is just way too low.

11 When you come in and you knock out water,
12 you're going to have to apply to a lot of property, and
13 I don't think they properly addressed the cost of the
14 litigation for trying to get eminent domain to push
15 those lines through.

16 MR. COVER: Could you wrap up, please?

17 DOUG PHILLIPS: Yes.

18 MR. COVER: Thank you.

19 DOUG PHILLIPS: We know that progress must take
20 place in order to maintain a strong eight-mile phase.
21 However, Route 3 makes a lot more sense. Route 3 will
22 negate much of the economic and social problems
23 associated with all the other routes.

24 Sentinel Butte Mutual Water Company and
25 myself strongly urges Edison and the CPUC to do the

PM-39
cont.

1 right thing and take the northern route, and we believe
 2 that there are some ways that you can adequately do that
 3 and address all the needs. Thank you.

4 MR. COVER: Thank you.

5 John Pehrson and then Scott Belknap.

6 John is passing, so we'll go to Scott.

7 Scott Belknap, and then next is Joe Ferrara.

8 SCOTT BELKNAP: My name is Scott Belknap. I own
 9 and operate Belknap Pump Company. I'm a
 10 third-generation well driller, and I have 39 years'
 11 experience in the business. I've also served on the
 12 Alta Irrigation Board for 12 years. I'm representing
 13 myself, but not them tonight.

14 I'm very concerned about any wells, pumps,
 15 and irrigation systems that are within a hundred feet of
 16 these transmission lines.

17 Personally, my uncle was killed when his
 18 drill rig contacted the power lines. Ten years later my
 19 father contacted a power line and was seriously injured,
 20 but lived through it.

21 Today, my son runs the drilling rigs, so
 22 when you talk about putting these transmission lines so
 23 many -- so near so many wells that we do work on, it's
 24 frightening. I hope you will locate these transmission
 25 lines in the route that places the least workers and

PM-39
cont.

PM-40

1 farm workers at risk.

2 I appreciate the vernal pools, but there's
 3 nothing more important than the safety and lives of the
 4 people who work in these areas.

5 Our drilling rigs on our pump hoists are
 6 typically 50 feet tall. These power lines, it appears,
 7 might be 32 feet off the ground, so there's great, great
 8 risk of contacting these.

9 Obviously, a lot of these wells are going to
 10 be, like people have said, they're going to be out of
 11 operation and going to have to try to find wells to
 12 replace them. I've had plenty of experience in this,
 13 and it's very difficult. There's a very good chance you
 14 can't replace these wells. The construction, as they've
 15 said before, and I want to testify to this, too, the
 16 construction could ruin many of these wells.

17 I'd also like to comment on the wagon wheel
 18 wells. You can't say enough about these wagon wheel
 19 wells. For all practical purposes, they can't be
 20 replaced. If you wanted to attempt it, you would have
 21 to hire a mining company and spend millions of dollars,
 22 because you can't send people down a hole a hundred feet
 23 in the ground nowadays unless it's a full-blown mining
 24 operation. And that's the only reason these wells work.
 25 Many years ago people went down them. So to think you

PM-40
cont.

1 can replace these wells is wrong. These people will be
 2 out of business if they lose these wagon wheel wells,
 3 and the others also.

4 My company will be impacted, there's no
 5 doubt about it, if you don't choose Route 3, because so
 6 many of the wells are underneath the towers or too close
 7 to the lines. Please choose Route 3. It's the safest
 8 for all the people and all the workers in that area.
 9 Thank you.

10 MR. COVER: Thank you.

11 Joe Ferrara and then James Gorden.

12 JOE FERRARA: Good evening. My name is Joe
 13 Ferrara. The purpose of this statement is to provide
 14 comment regarding the new EIR that has been prepared for
 15 Southern California Edison San Joaquin Cross Valley
 16 Loop, KB transmission line project.

17 My wife Mary and I are landowners adjacent
 18 to the proposed Route 1. I am a member of the farming
 19 family that has farmed in the Exeter to Lemon Cove
 20 corridor for 90 years. I believe that my general
 21 knowledge of this area and the hydrological issues that
 22 are specific to this area give me the necessary
 23 background to make the following observations and
 24 statements. I appreciate the opportunity to speak to
 25 you this evening.

PM-40
cont.

PM-41

1 In reviewing the DEIR that has been prepared
 2 for this project, I was pleased to note the recognition
 3 of wells, pipelines, and other structures in Section
 4 4.7-11 that will be impacted by proposed Route 1
 5 right-of-way.

6 My concern is with the general statement
 7 found in the EIR, Section 4.11 A and 4.11 B, concerning
 8 mitigation measures that would be implemented to address
 9 these concerns.

10 It is my experience and observations that
 11 lead me to believe that the general statement concerning
 12 the engagement of a qualified water well drilling
 13 contractor to relocate those back wells and thus
 14 mitigate this issue is a much too simplistic approach.

15 I believe many of the wells within and in
 16 close proximity to the right-of-way on proposed Route 1
 17 cannot be duplicated, and thus mitigation will not be
 18 possible as described in the statement as presented.

19 It is general knowledge in the local
 20 agricultural community that any attempt at welder land
 21 in locations east of Road 196 to the north, northeast,
 22 east, and southeast of Exeter can yield very mixed
 23 results. This area has been an established permanent
 24 crop area dating back to the early 1900s.

25 The total development of this area did not

PM-41
cont.

1 occur until the formation of the Exeter Irrigation
 2 District in the late 1930s and the completion of the
 3 Friant Kern Canal in early 1950s. These events brought
 4 the addition of surface water to the area to help
 5 stabilize the overdraft of the underground aquifer.

6 And attempting to drill a replacement well
 7 is not an uncommon experience to move over 50 feet from
 8 what has been a productive well for 50 to 70 years and
 9 drill what we describe as a duster or a drive home. It
 10 is not uncommon to drill several such holes and not find
 11 a location to provide the quantity of water that was
 12 available in the original location.

13 This was the experience of many farmers in
 14 the early development period, and that was the reason
 15 much of this area was not developed until supplemental
 16 was brought into the area.

17 Unlike the farming area between Exeter and
 18 Visalia, the aquifers to the east and northeast of
 19 Exeter are very shallow, small in volume and specific in
 20 location. The general geology of this area does not
 21 allow for deep drilling in many instances.

22 The wells in this area typically have volume
 23 yields in the 100 to 300-gallons-per-minute range. The
 24 development of low-volume irrigation technology gives us
 25 the ability to utilize these small-volume wells to

PM-41
cont.

1 successfully farm the permanent crops that you find in
 2 our area.

3 We are fortunate to be able to supplement
 4 these wells with Exeter Irrigation District water or
 5 other surface water sources to help stabilize our
 6 groundwater level.

7 Reports show average standing groundwater in
 8 1921 was 59 feet; in 1947, standing groundwater at 105
 9 feet; and the most recent measurements within the Exeter
 10 Irrigation District show an average of 65.9 feet
 11 standing groundwater.

12 Recent Federal Court rulings and continued
 13 litigation and environmental settlements have the
 14 potential to reduce the total amount of supplemental
 15 water available in this area. These issues, along with
 16 continued drought conditions, threaten our ability to
 17 maintain adequate groundwater for our crops.

18 MR. COVER: Joe, could you wrap up, please?

19 JOE FERRARA: Yes.

20 MR. COVER: Thank you.

21 JOE FERRARA: All of the issues above need to be
 22 very concerned about the thought of the abandonment of
 23 good, well-proven productive wells that have given good
 24 service to the farmers for many years. We are always
 25 concerned that such a well will collapse or for some

PM-41
cont.

1 other reason become nonperforming. The return of a
 2 replacement well will not be as productive as the
 3 reality that we all face.

4 The moving of pipelines, pumping stations,
 5 and other filtration equipment necessary to deliver
 6 water to our crops also is a concern, and in our mention
 7 of the mitigation, there's no mention of the possibility
 8 that it may take more than one well to replace the
 9 existing wells. The need for additional wells could
 10 require a total redesign in the irrigation system.

11 I think it is important to note there is no
 12 mention in the Exeter Irrigation District Distribution
 13 System, the District encompasses approximately 12,700
 14 irrigated acres and includes the city -- the majority of
 15 the City of Exeter. The entire system includes 60 miles
 16 of underground pipeline, the depth of the District
 17 pipeline running from 5 feet to 14 feet.

18 In addition, the District has many turn-out
 19 air vents and pumping stations and reservoirs as part of
 20 the infrastructure.

21 The proposed route runs adjacent to crosses
 22 several times the pipelines in its proposed proximity to
 23 the District pipelines and other aboveground
 24 infrastructure. A thorough survey impact on the
 25 proposed route will have to the entire Irrigation

PM-41
cont.

PM-41
cont.

1 District Distribution System needs to be conducted.

2 I've been informed by the management that no
 3 inquiries by either Southern California Edison or
 4 Environmental Science Associates have been made
 5 concerning any potential environmental impact that the
 6 proposed Route 1 would have on the Exeter Irrigation
 7 District.

8 Major design changes to the underground
 9 pipelines or aboveground infrastructure will impact the
 10 ability to deliver water efficiently to the -- and would
 11 have to be mitigated.

12 MR. COVER: Could you wrap up, please?

13 JOE FERRARA: I am now.

14 MR. COVER: Okay.

15 JOE FERRARA: I feel that the complete review of
 16 the hydrology of the area east and northeast of Exeter
 17 along the proposed right-of-ways is a necessary addition
 18 to the EIR for the proposed Route 1. I also believe
 19 that my concerns that center on landowners' ability to
 20 service equipment, will alter pipeline adjacent to or
 21 within the proposed right-of-way which should be
 22 studied.

23 I'll sum up here. I have several other
 24 pages.

25 MR. COVER: Could you wrap up your wrap up?

1 JOE FERRARA: Yes.

2 It is my belief that the investigation of
3 the fragile groundwater conditions that exist on the
4 proposed Route 1 is just beginning. The hiring of a
5 qualified well drilling contractor is not the solution
6 to mitigating many of the well locations that can be
7 impacted by the proposed route.

8 I feel that many of these wells cannot be
9 duplicated. The loss of a good productive well will
10 cause the loss of highly productive agricultural ground
11 and leave the property owners with a devalued piece of
12 property.

13 I urge the continued search for a way to
14 mitigate the environmental issues on Route 3 as stated
15 in the filings by PACE on July 20th, 2009.

16 The modifications to Route 3 to avoid the
17 environmental sensitive areas cited in the DEIR will
18 allow for the maximum use of the existing Southern
19 California Edison right-of-way, which is the intent of
20 Senate Bill 2431, better known as the Garamendi
21 Principle. Route 3 is still the most logical route, and
22 it's in the best interest of the state. Thank you.

23 MR. COVER: James Gorden. And this might be one
24 that I pronounce wrong, Wayne Van Dellen.

25 JAMES GORDEN: Thank you. My name is James M.

PM-41
cont.

1 Gorden. I have resided at 24740 Avenue 324 in Lemon
2 Cove since 1972, where my wife and I have raised our
3 family and been nurtured in spirit and psyche from the
4 rural environment and the sublime views, the surrounding
5 Valley foothills, the Sierra Nevada mountains.

6 I grow citrus and olives adjacent to the
7 applicant's desired route and within the Big Creek
8 Rector right-of-way west of Ivanhoe. So it could
9 conceivably be affected by all the above.

10 I would like to take issue with the manner
11 in which the EIR characterizes the resources with which
12 it deals and through which the proposed route would
13 pass.

14 They provide a series of mostly factual
15 statements as the visual quality, for example, of
16 various parts of Yushed from Venida intersection, which
17 is the intersection of Highway 65 and Highway 198, they
18 describe as industrial, largely, because the SCE
19 substation that exists at that point.

20 This happens to be a major route to the
21 Sierras, and of course, it's not designated as a scenic
22 highway. My point is, the facts represented -- the
23 facts presented and the description don't really tell
24 the whole story.

25 This stretch of Highway 198 provides the

PM-42

1 most dramatic views of the Sierra Nevada range from the
 2 Valley floor to the crest of the Sierra available, I
 3 think, on a State highway anywhere on the west slope of
 4 the Sierra, making the views on the clearest day of
 5 snowcapped peaks and a foreground of orange trees truly
 6 spectacular. If this is considered a State or natural
 7 resource, it is considered a treasure by those of us who
 8 frequently have the privilege to enjoy it.

9 We also know about the actions of scores of
 10 tourists who we observe pull off on the south side of
 11 the highway on the broad shoulder near Badger Hill,
 12 which the EIR describes as sort of a normal view. We
 13 see these tourists pulled off there with camera in hand,
 14 and we know that others also consider it to be special
 15 vista.

16 The tabular view of sensitive findings for
 17 Table 4.1-2 indicates that Alternates 2, 3, and 6 all
 18 cross State Route 198. These crossings would be via the
 19 existing right-of-way. It doesn't note that the
 20 proposed project will require two new crossings in
 21 addition to the existing right-of-way crossing, which
 22 would remain intact. We see no reason why two major new
 23 220 killivolt crossings of this scenic corridor should
 24 be allowed.

25 As an agriculturalist, I'd like to speak

PM-42
cont.

1 briefly to the ag resources section of the EIR.

2 MR. COVER: Could you wrap up, please?

3 JAMES GORDEN: Yeah.

4 Most of these comments have been made
 5 before, but I feel that the EIR rather casually and
 6 imperfectly deal with these impacts, mostly water
 7 impacts.

8 In short, we believe that recycling and
 9 upgrading the existing right-of-way as in Alternate 3,
 10 with some of the mitigation -- some mitigation for
 11 vernal pools near Seville offers the best hope of a
 12 project best for most interests. I say if we can
 13 recycle our cans and bottles, why not our PUC -- utility
 14 rights-of-way. Thank you.

15 MR. COVER: Thank you. Wayne Van Dellen, and then
 16 Joyce Frazier.

17 WAYNE VAN DELLEN: Wayne van Dellen.

18 We have 20 acres adjacent to Mr. Hacobian,
 19 whose son spoke, one of the first times, and he's here
 20 with his granddaughter. And I mention that because at
 21 Foothill Bible Church, we are taught to target the third
 22 generation. And we saw that not only with him, but with
 23 also the Hengst family. We saw three generations here.

24 And 1st Peter 4:10 says, "As every man has
 25 received a gift, even so minister one to another as good

PM-42
cont.

PM-43

1 stewards of the manifold grace of God."
 2 We are not only stewards of what God has
 3 given us, land, water, wells; we are also told that
 4 children are inherent gift from the Lord. And we saw
 5 these three generations here and -- with the Hengst
 6 family, and we are -- that's what we're doing. We're
 7 thinking of what's best for them, what's -- the land,
 8 not only for ourselves, but for the future generations.
 9 Thank you.

10 MR. COVER: Thank you.

11 Joyce Frazier and then George McEwen.

12 JOYCE FRAZIER: My name is Joyce Frazier, and I
 13 live off of Avenue 376 in Woodlake -- or Elderwood and
 14 very near, a few houses from where the line would be
 15 pushed through across Dave Hengst's property, four
 16 houses from it.

17 I would like to note that, and fault the
 18 report, that so blindly mitigates with words the actual
 19 damage it reports.

20 For example, the biological resource
 21 section, it acknowledges that Route 2 is home to fairy
 22 shrimp, vernal pools, plants like the Hoover's spurge
 23 and the frog, just like Route 3. Somehow, you can
 24 mitigate that out, but you can't mitigate out what
 25 the -- Stone Corral, vernal pools.

PM-43
cont.

PM-44

1 It would seem to me that the report very
 2 much missed its mark when it didn't even mention that it
 3 could -- could move the power line that it's planning on
 4 putting through Route 3 to avoid that biological damage.
 5 That would then leave Route 3 as the preferred
 6 environmental location. As the report did correctly
 7 note, lesser amounts of farmland is affected by Route 3.

8 Also, I believe that -- since I mentioned
 9 this once before, I can mention it again. Between my
 10 house and that line there are four other residences with
 11 small children. And I don't think that that power line
 12 adequately protects children from the effects of high
 13 voltage power lines.

14 This is mentioned in the report of an
 15 attachment, and I would note that at least three
 16 scientists in 2002 felt that, to one degree or another,
 17 the EMFs, that is, electromagnetic fields, can cause
 18 some degree of childhood leukemia, adult brain cancer,
 19 Lou Gehrig's disease, and miscarriage.

20 So I'm asking the court to -- not court,
 21 excuse me, not court -- but the PUC -- and essentially
 22 it will be the court -- to consider Route 3.

23 MR. COVER: Thank you.

24 George McEwen and then Robert Ward.

25 GEORGE MCEWEN: My name is George McEwen. I

PM-44
cont.

1 reside at 22114 Boston Avenue in Exeter. I have four
 2 concerns with the Draft EIR. The first one is 4.1-1A.
 3 Highway 198 is the scenic corridor to
 4 Sequoia National Park. In 1925 the entrance to Exeter
 5 had an archway with a sign stating, Gateway to the
 6 Sequoia National Parks. We all know this beautiful view
 7 as we travel eastward towards Exeter. June talked about
 8 it just here just a few minutes ago.

9 The EIR mitigation measure is 4.1-1A, states
 10 the visual impact is less than significant. It shows a
 11 picture, Figure 4.1-7B, of a simulated view of 106-foot
 12 towers. You can barely see these towers in the
 13 simulated picture. In real life you will be able to see
 14 them, and that will be significant. I believe the
 15 simulation is wrong and should be corrected to what it
 16 will actually look like.

17 I would like to also state at this time one
 18 other simulated picture, one of my favorites, it's
 19 Figure 4.1-11B, which is taken down the street from
 20 where I live. This picture shows a 30 or 35-foot power
 21 pole next to a simulated 160-foot tower. The simulated
 22 picture makes the 160-foot tall tower look 60 feet tall.
 23 This picture also needs to be corrected or omitted. And
 24 by the way, these simulated pictures were done by
 25 Southern California Edison, and I think they're just a

PM-45

1 little bit biased.
 2 The second one, 4.2-1A, my second concern is
 3 soil and soil compaction during construction.
 4 On the proposed route we have two towers on
 5 our property. The heavy equipment used to set these
 6 towers will undoubtedly cause severe soil compaction.
 7 This compaction will definitely affect any orchard and
 8 any farmland. I don't need to know the broad mitigation
 9 measures in 4.2-1A. I need to know in detail how
 10 Southern California Edison is going to rectify this
 11 problem.

12 The third one, 4.2-5. The Draft EIR states
 13 the impact to existing irrigation and the other -- and
 14 similar systems required for farming as less than
 15 significant.

16 Now, we've talked about this many times
 17 tonight, and I'm going to do it again.

18 Removal of wells to do this project may be
 19 very significant to the farmer. You cannot duplicate
 20 this well. Drilling a new well doesn't mean you will
 21 get the same productive well. That is to say, it will
 22 be the same level, the drop will be the same, or the
 23 gallons per minute be the same. Now, this is easier
 24 said than done. And in certain growing areas this may
 25 not be possible and has been mentioned several times

PM-45 cont.

1 tonight.

2 Again, I believe growers who will be

3 affected by this need to know in detail how this will be

4 rectified. In some cases this might be a Class 1

5 significant unmitigable.

6 Route 3 will not have this water well issue

7 because the power lines were there before wells were

8 drilled.

9 The fourth one is 5.13. Alternate Route 3,

10 according to this report, has the least impact to

11 agricultural land, and it would be the environmentally

12 superior route, except for the vernal pools and the

13 Stone Ecological Reserve. 5.3 states that this has

14 significant unmitigatable impacts to preserves.

15 The EIR states that there is no way to go

16 around it. I'm here to tell you our PACE lines

17 transmission consultant has developed a very good route

18 around the preserve that does not affect housing and

19 production of agriculture. Part of this route uses an

20 abandoned railroad right-of-way.

21 Our consultant and three members of PACE met

22 with two representatives of the Department of Fish and

23 Game. The opinion of the Department of Fish and Game

24 was that it is feasible to reroute Alternate 3 around

25 the preserve. Using this reroute will designate

PM-45
cont.

1 Alternative Route 3 the environmentally superior route.

2 I am sure there will be other concerns

3 addressing the Draft EIR. The reality is the project is

4 needed and will get approved.

5 The EIR is on the right track. It may not

6 have addressed some issues completely, but it is trying

7 to avoid impacts to our agricultural and our communities

8 and to our environment.

9 Using the existing right-of-way, that is,

10 using the existing resource, or the Garamendi Principle,

11 and avoiding the vernal pools by going around them is

12 the best solution for this project.

13 These lines have been here for almost a

14 hundred years. Yes, we have encroached upon them, but

15 they were here first. And since they are also a hundred

16 years old, they will be upgraded sooner or later with

17 new singular poles and taller poles. The vernal pools

18 will still be there. So if you don't go around them

19 now, you will have to go around them when the line is

20 upgraded. In my opinion, it will be a lot less

21 expensive if the upgrade is done now than 10 or 15 years

22 from now.

23 Thank you for your time.

24 MR. COVER: Thank you.

25 Robert Ward and Steve Wardly.

PM-45
cont.

1 ROBERT WARD: My name is Bob Ward, and I am Exeter
 2 area farmer, a fourth generation citrus grower.

3 We have about 80 acres of family farm that
 4 will be impacted by Route 1. It will take about nine
 5 acres of our prime young citrus trees, take it out of
 6 production. With the loss of about 25,000 a year income
 7 and over a 30-year period, that adds up to a lot.

8 The power lines will interfere with
 9 irrigation biplanes, canal water deliveries. And the
 10 ERA -- the EIR does not address all those concerns. It
 11 also creates a vacant path for a lot of problems with
 12 trespassers and dumping. And farm workers' safety is
 13 another concern because it doesn't completely address.
 14 And the use of helicopters for spraying and frost
 15 protection, it doesn't address the problems that you'll
 16 have with the power lines close to this operation.

17 We favor Route 3 as it has less impact on
 18 agriculture. And so we appreciate your consideration
 19 for Route 3. Thank you.

20 MR. COVER: Thank you.

21 Steve Wardly and Gus Marroquin.

22 STEVE WARDLY: My name is Steve Wardly. I'm the
 23 Supervisor of Tulare County representing District 4,
 24 which unfortunately, has both Route 2 and Route 3
 25 located in it, and we'll moved to proposed route in

PM-46

1 District 1. I'm just joking.

2 MR. COVER: Where's that one to?

3 STEVE WARDLY: I want to address the Draft
 4 Environmental Report. The concern I found was the
 5 conclusionary comments about the significant unmitigable
 6 impacts on the vernal pools.

7 My reasoning is that in looking through the
 8 report, it's difficult to see that there is an existing
 9 route that runs right through the ecological reserve,
 10 the Stone Corral Ecological Reserve.

11 In fact, if you look at 4.453, it says the
 12 proposed right-of-way would traverse 4.55 miles within
 13 the Stone Corral Ecological Reserve. It's already
 14 there.

15 This is not -- if you read this report, it
 16 sounds as if this will be a brand-new line going through
 17 the ecological reserve. The existing lines goes through
 18 the ecological reserve now.

19 And if you look at the existing line, which
 20 consists of the two spot towers, which will be replaced
 21 by one, extrapolating from the numbers that were used
 22 referring to the preferred alternative, it would appear
 23 there are probably 38 towers there now which could be
 24 replaced with as few as eight. And so to think there's
 25 no way to mitigate it, it seems like there would be

PM-47

1 opportunities to mitigate within the existing
 2 right-of-way. The existing right-of-way, which is 150
 3 feet occupied now by two towers, will have one tower,
 4 and in the Draft EIR it indicates there's 150 -- I'm
 5 sorry, 100 feet of that is simply just left alone. It's
 6 not being used. So the opportunities to mitigate within
 7 the right-of-way have not been explored, which would be
 8 another way of dealing with that.

9 I think this idea that this is not
 10 mitigatable is not -- is conclusionary and not supported
 11 by the facts.

12 One of the benefits, too, of Route 3 is that
 13 it is the least number of miles of new right-of-way
 14 acquisition. And it would seem like one of the
 15 principles that would be applicable here would be to
 16 maximize the existing right-of-way, minimizing the
 17 amount of new right-of-way required to be acquired.

18 Under the Route 2, 12.2 miles of new
 19 right-of-way are required. Under Route 3 only 9.7,
 20 about a 20 percent reduction. So that would be another
 21 benefit of Route 3 over Route 2.

22 But I think the big problem here is, again,
 23 the comments about mitigation on vernal pools are
 24 inadequate because there are opportunities.

25 And there's a concern about the roads of

PM-47
cont.

1 access, the need that that would have an impact. We
 2 have the existing lines that have been there now for a
 3 hundred years that traverse this ecological reverse
 4 without those roads.

5 It would seem like one mitigation measure
 6 might be to make an exception to that, to that preferred
 7 plan of building roads, because you can access the
 8 property most of the year anyway when it's dry, and
 9 that -- apparently that's how it's been done for the
 10 last hundred years. Thank you.

11 MR. COVER: Thank you.

12 Gus Marroquin, pass.

13 Tricia Stever. And then next is John
 14 Kirkpatrick. Or did he leave?

15 Go ahead.

16 TRICIA STEVER: Good evening. My name is Tricia
 17 Stever and I represent the Tulare County Farm Bureau.

18 In respect for time, there's so much that
 19 has been said tonight, and I don't want to duplicate,
 20 but on behalf Tulare County Farm Bureau, we are a
 21 grassroots voluntary member organization that represents
 22 over 2700 landowners and member families here in Tulare
 23 County. Our mission is to protect and enhance the
 24 viability of agriculture.

25 To add a little more context in terms of

PM-47
cont.

1 community values we've heard so much about tonight,
 2 we've heard from many individual landowners and growers
 3 who truly value their lands and the reason for which
 4 they have a living and a way of making a living for
 5 their family.

6 Agriculture is the largest private employer
 7 in the County, with farm employment accounting for
 8 nearly a quarter of all of our jobs. Processing,
 9 manufacturing, and service industries provide many other
 10 related jobs. Six of our top 15 employers in the County
 11 are directly related to agricultural food handling and
 12 processing companies, including numerous fruit packing
 13 houses and dairy processing plants. And one in every
 14 five jobs in the Valley is directly related to
 15 agriculture, with two out of every three indirectly
 16 related.

17 As the second largest ag economy in the
 18 nation, with more than \$5 billion of gross receipts in
 19 our 2008 crop report, we take very, very seriously the
 20 development and construction and activity that would
 21 disrupt agricultural land and disturb private property.

22 It seems evident here tonight that not only
 23 looking at the environmentally superior route is
 24 adequate enough, but to look and find the agriculturally
 25 superior route is the choice that we as citizenry are

PM-48



1 asking you to make here tonight.

2 In reviewing the EIR, we share all of the
 3 concerns that have been echoed here tonight by many,
 4 many others. We believe that Routes 1, 2, and 6 have
 5 the most significant and unavoidable impacts to
 6 agriculture, and that our grassroots organization PACE
 7 has identified a work-around alternative, what has been
 8 identified here tonight as Route 3A, as very reasonable,
 9 very feasible, and absolutely the right alternative to
 10 choose.

11 Out of deference for time, I'm going to say
 12 that we will submit more extensive written comments
 13 jointly filed with the California Farm Bureau
 14 Federation, which represents over 90,000 farm families
 15 in California.

16 But just to iterate that, yes, we believe
 17 there are substantial mitigation issues with the report
 18 that are not adequately or feasibly addressed, from
 19 hydrological water issues that you've heard about
 20 numerous times this evening, as well as construction
 21 activities and carbon sequestration that will result or
 22 be lost through the loss of trees and permanent orchard
 23 crops, as well as quality-of-life impacts that have also
 24 been enumerated here tonight.

25 I want to share one other concept that

PM-48 cont.

PM-49



1 hasn't yet been mentioned tonight, and that is the idea
 2 that maybe a community-based mitigation advisory panel
 3 could be assembled as one of your mitigation monitoring
 4 principles, and that Farm Bureau, our quality extension
 5 office, or Ag Commissioner, landowners, representatives
 6 from PACE, representatives from Edison, and other key
 7 stakeholders.

8 I think it's evident in this room tonight
 9 that we're here to find a solution for you. We
 10 recognize that the project is going to move forward.
 11 Let us be a part of that solution.

12 And Farm Bureau will be stating in their
 13 evidentiary hearing testimony that's going on in a
 14 separate process that this advisory committee could be
 15 enacted immediately and become a community construct for
 16 which you can bring forth and surface the issues that a
 17 lot of landowners here tonight have raised, and
 18 potentially as you look to choosing Route 3, have that
 19 community construct for evaluating and adding to or
 20 augmenting to the monitoring principles of mitigation
 21 that we feel are inadequate.

22 So in closing, I do believe that in my
 23 written comments we'll share a lot more about some of
 24 the specific mitigation measures that we feel are
 25 inadequate, but we hope you'll give serious



PM-49
cont.

1 consideration to allowing this community to play a
 2 continued role, if the project is granted on whatever
 3 route alternative, to have an input on helping resolve a
 4 lot of these landowner issues.

5 We, too, believe that the 3A is by far the
 6 very best route there is, and also support the
 7 implementation of using the Garamendi Principle to
 8 report -- to respect that using the existing
 9 transmission right-of-ways is by far the superior choice
 10 in routing this line.

11 Thank you very much.

12 MR. COVER: Thank you.

13 John Kirkpatrick and then Greg Kirkpatrick.

14 JOHN KIRKPATRICK: Good evening. It's good to see
 15 you now again, Jensen, Doug. We must thank you for
 16 coming down again after two workshops and two spoken
 17 sessions, back again. We know that you have taken our
 18 concerns seriously, and we want to move ahead with good
 19 relations as we critique this EIR.

20 I have 16 pages of notes in all.

21 MR. COVER: Could you wrap up, please?

22 JOHN KIRKPATRICK: I think we're about to the
 23 point where we can close and take a vote and just all go
 24 home and settle it.

25 I would like to speak for a moment about the

PM-49
cont.

PM-50

1 historic existing transmission line. It's really not
 2 the Big Creek record line. It's the Big Creek Eagle
 3 Rock line. It's 214 miles long. But -- 41 miles long,
 4 excuse me. It was built beginning in 1913, and Rector
 5 was just a stopping off point. It's not a terminal plan
 6 as indicated in the EIR.

7 If you were around when I was growing up,
 8 there's no industrial change in 50 cycles to 60 cycles.
 9 Southern California was 60 and then 50. That ended in
 10 1942. We had to turn our clocks. And that's a bit of
 11 the history.

12 The important thing about this history is
 13 that that right-of-way was established a hundred years
 14 ago. And everything that's happened since has adjusted
 15 itself to that right-of-way.

16 The other routes, all the other
 17 alternatives, have developed in the ways that they have
 18 developed, into intensive urban developments, intensive
 19 agriculture. And now we are going to superimpose an
 20 additional right-of-way on those.

21 One of the requirements of CEQA is that we
 22 attempt to avoid significant impacts, particularly
 23 significant unavoidable impacts, and that's very simple.
 24 We just use an existing right-of-way, using and
 25 employing the Garamendi Principles that have been

PM-51

1 mentioned several times here. This would avoid all of
 2 those impacts with the rights-of-way.

3 I would suggest to you that your
 4 hydrogeologist probably never knew about wagon wheel
 5 wells before this evening. And he might have known
 6 something about them if he had used some of the really
 7 good hydrogeological documents that are available. And
 8 I will give you three of them.

9 There's one called the Technical Studies in
 10 Support of the Factual Report for the Exeter Irrigation
 11 District, 1949, done by the Bureau of Reclamation.

12 About the same time, a similar report was
 13 done for the Idaho Irrigation District. These are
 14 classic hydrogeological documents that have been
 15 ignored. They're not mentioned anywhere in your
 16 bibliography.

17 In addition to that, there are two studies
 18 done for the Kaweah Delta Water Conservation District.
 19 The titles are, The Investigation of Water Resources of
 20 the Kaweah Delta Water Conservation District.

21 If those had been consulted, I think that
 22 some of the problems that you're facing with revising
 23 this EIR now and making it really a good EIR might have
 24 been resolved.

25 I have a letter from Dr. Ken Schmidt, a

PM-51 cont.

PM

PM

1 certified hydrogeologist. I was going to read it into
 2 the record. I don't need to. It will be mailed to you
 3 by Dr. Schmidt himself.

4 The infrastructure of all the alternative
 5 routes really is an unknown quantity.

6 If you folks would talk to some of us old
 7 timers and young farmers as well, you would know that
 8 there are buried pipelines, drain lines, all kinds of
 9 infrastructure that these lines cross that have not been
 10 explored at all. They're invisible.

11 Take, for example, a stretch of the line
 12 that goes from Structure Number 74 to Structure Number
 13 84. That's a stretch of about two miles.

14 Underneath the right-of-way there is a
 15 14-inch buried concrete pipeline that transports water
 16 from the Foothill ditch to a farm property, 4,500 feet
 17 of pipeline directly under the right-of-way. No
 18 parallel encroachments or liable -- to -- encroachments
 19 will be permitted. Moving of this or covering of this
 20 or replacing of this, vibrating the ground of this
 21 50-year-old -- 50-year-old pipeline may cause it to
 22 collapse even.

23 I would suggest that in addition to talking
 24 to the people from Edison company, knowing that your
 25 environmental study team has spent time with them, they

PM-51
cont.

PM-52

87

1 can talk to some of the people that you met here
 2 tonight. Thank you very much.

3 MR. COVER: Thank you.

4 Greg Kirkpatrick, and then Johnny Sartuche.

5 GREG KIRKPATRICK: Good evening. My name is Greg
 6 Kirkpatrick, and in a former career I was a project
 7 scientist and a lead biologist on biological surveys for
 8 Woodward-Clyde Consultants, now URS. I led several
 9 major pipeline survey projects, including Mojave
 10 Pipeline Extension from Sacramento to Bakersfield, and
 11 the Santa Fe Pipeline from Mojave Desert.

12 One project that we did back in 1992 for the
 13 Tulare County Association of Governments was Focused
 14 Biological Surveys for Eight Target Species in Tulare
 15 County. That's actually the title of the published
 16 report, that you look for and discover the Hoover's
 17 spurge population, San Joaquin Valley Orcutt grass
 18 populations, vertical shrimp, vertical fish, and tiger
 19 salamander populations that became the basis for
 20 acquisition and creation of the Stone Corral Ecological
 21 Reserve, along with discovery and analysis of all the
 22 existing habitat for those species within the Tulare
 23 County Valley areas for the creation of Tulare County's
 24 habitat conservation plan. So we did a very extensive
 25 analysis in 1992, which is the wettest spring on record.

PM-53

88

1 I see two deficiencies in reviewing the
 2 biological resource section of the Draft EIR. First is
 3 an inadequate discussion of the critical habitat
 4 designation and the areas of the project that cross
 5 through designated habit -- critical habit for Hoover's
 6 spurge and San Joaquin Valley Orcutt grass.

7 The species, even in designated habitat
 8 areas, are only found where the primary constituent
 9 elements for habitat for these species exist. And the
 10 report that we prepared in 1992 and the established
 11 report in 2008 will conclude that there is no critical
 12 habitat or no primary constituent elements on
 13 Alternative Routes 2 and 3. And I would also state that
 14 there is no critical habitat or primary constituent
 15 elements outside the Stone Corral Ecological Reserve on
 16 Alternative 3.

17 The second element that I think is
 18 inadequate in the Draft EIR is the conclusion that the
 19 impacts to the Stone Corral Ecological Reserve are
 20 unmitigable. This is not adequately supported in the
 21 discussion.

22 I think the avoidance measures listed for
 23 the other routes can be applied to Stone Corral
 24 Ecological Reserve, and impacts to the listed species
 25 can be avoided, particularly with rerouting around the

PM-53
cont.

1 preserve or through areas of the preserve that are where
 2 the species are less likely to be present.

3 And primarily, that would be the pools in
 4 the northwest corner of the preserve are of a different
 5 nature and of less quality -- lesser quality and
 6 probably do not support any of the target species and
 7 are smaller and can be avoided.

8 So I think, too, that there is an
 9 opportunity in mitigating and working around the Stone
 10 Corral Ecological Reserve for acquisition and
 11 restoration of additional land. There's about 20 acres
 12 of degrading grassland that's adjacent to the preserve
 13 that could be acquired and used and restored for
 14 mitigation, and this would also mitigate impacts to
 15 future maintenance or restoration of the existing rector
 16 line that runs through the reserve.

17 I think, in conclusion, the impacts to
 18 biological resources on all the proposed lines can be
 19 reduced to less than significant levels. That being the
 20 case, then the -- Alternative 3 is no longer the
 21 environmental -- the superior alternative and -- or is
 22 the environmentally superior alternative to Alternatives
 23 as 1, 2, and 6.

24 So I think with these reductions and
 25 reevaluation of this conclusion about the unmitigable

PM-53
cont.

1 impacts, the nature and conclusions of the EIR change
 2 dramatically. Thank you.

3 MR. COVER: Thank you.

4 Johnny Sartuche.

5 JOHNNY SARTUCHE: Yes.

6 MR. COVER: And next is Bill Pensar.

7 JOHNNY SARTUCHE: Hello. My name is Johnny
 8 Sartuche, and I'm here on behalf of the local Native
 9 American tribe, the Wuksachi.

10 All of these routes will be crossing areas
 11 of cultural sensitivity, which we believe is special in
 12 our cultural tradition that we are trying to apply to
 13 this day.

14 Our main concern is that whichever route is
 15 chosen, as they come across these cultural sensitive
 16 areas, that they be treated with respect, honor, and
 17 dignity, and that the local Native American people have
 18 a right to say what is done with those properties that
 19 are found in those areas, because to us, it has great
 20 meaning.

21 And my dad came here from Squaw Valley.
 22 It's kind of hard for him to get up, but he's made it
 23 here this evening and asked me to say this on his
 24 behalf, that we can keep that in mind. And that is our
 25 main concern, is that these areas have been destroyed

PM-53
cont.

PM-54

1 and desecrated over many years, and what we have left,
 2 we may not be able to actually visit them ourselves, but
 3 to us they still have significant meaning, and we would
 4 like to preserve what is left of that.

5 And on behalf of the Wuksachi tribe, I want
 6 to thank you for allowing me to say that.

7 MR. COVER: Thank you.

8 Bill Pensar and Don Fulbright.

9 BILL PENSAR: My name is Bill Pensar, 32811 Road
 10 244, Lemon Cove.

11 We commend your planning and design acumen
 12 and recommendation of the utilization of an existing
 13 right-of-way. This concept reduces EMF exposure to
 14 nearby residents of the existing lines by more than 80
 15 percent, provides approved lines to -- more comfortably
 16 to all apian species, especially large raptors, in
 17 places perceived burden on those who reap the greatest
 18 benefit from the line. The major shortcoming is that it
 19 is not extended farther to the north to areas void of
 20 habitation and cultivation, thus fully exploiting the
 21 existing right-of-way through the Valley floor.

22 What assurances do we have from Southern
 23 California Edison Corporation that the existing lines,
 24 as they approach their hundredth anniversary, are
 25 compatible with the environment that has grown up around

PM-54
cont.

PM-55

1 them? Quite bluntly, are they safe?

2 Perhaps this is an investigation germane to
3 the environmental process, that should deficiencies be
4 discovered, those facts would have a bearing on the
5 decision-making process.

6 In light of the fact that the Rector north
7 right-of-way will need rebuilding at some point in the
8 future, arguments against its utilization fall largely
9 on barren ground.

10 Even so, the need for integrating this
11 corridor into the City of Visalia's urban fabric should
12 be given much consideration to your division's credit
13 and in large part due to your commitment to spending
14 time in our area.

15 Countless hours of local questions and fact
16 finding have been devoted to arriving at a solution to
17 this problem that is practical, equitable, and will
18 withstand the immutable judgment of time.

19 You will hopefully hear much about a locally
20 developed work-around which avoids the impediments
21 outlined in the Draft EIR for Route 3. This Route 3A
22 plan with its improvements is consistent with common
23 sense, stated policy, and the principles of good design
24 and conservation.

25 Cross straight fair design is the false



PM-55
cont.

1 bargain. The alternatives only provide us with low
2 initial cost and make no mention of the bills that will
3 have to be paid in the future, bills of mediocrity, of
4 divided communities, bills of damaged farms, neighbors,
5 and vistas. Bills for poor design will keep on coming
6 and never be paid in full.

7 Finally, there is the matter of some
8 erratic -- or inconsistencies in the Draft EIR.

9 The draft is an error in that it states no
10 daycare facility exists within a quarter of a mile of
11 the proposed project. In at least one instance, State
12 licensed -- a State-licensed one exists, and has existed
13 for some years, at 2490 Filbert in Exeter, approximately
14 500 feet from the proposed Route 1.

15 The draft also fails to carefully delineate
16 routes and elevations in the myriad gravity delivery
17 agricultural water systems of the area, while
18 simultaneously requiring three feet of cover over all
19 utilities under the right-of-way. This may not be
20 feasible with gravity delivery systems.

21 Additionally, in the Draft's description of
22 land use planning policies it states that no homes in
23 the -- Lemon Cove would be located south of the
24 alignment. In fact, there are more than a dozen homes
25 to the south and southeast of proposed Route 1.



PM-55
cont.

1 We thank you for your continued diligence
 2 and scrutiny of this project.
 3 MR. COVER: Thank you.
 4 Don Fulbright, Kenn Maskal, Trish
 5 Whitendale, Paul Boyer. And, Suzanne Farag, you'll be
 6 next.
 7 TRISH WHITENDALE: Trish Whitendale, 29349 Road
 8 152 in Visalia.
 9 I hope you can rest your poor fingers soon.
 10 Thank you very much for your hard work on
 11 the Draft EIR. I am living on a family farm which will
 12 be dissected by proposed Route 1.
 13 I would like to suggest that you lengthen
 14 Route 3 and 3A to serve more than one purpose for
 15 Edison.
 16 I would like to agree, or add to what
 17 Mr. McEwen said. He said the power lines on Route 3
 18 will need to be upgraded at some point, and doing that
 19 now will be less expensive than it would be ten years
 20 from now. I have to believe that Edison has a plan for
 21 this upgrade.
 22 I submit that the cost to Edison of
 23 upgrading the lines on Route 3 or 3A now would be much
 24 less in time and monies spent than a total cost in time
 25 and money of constructing Route 1 and then upgrading

PM-55
cont.

PM-56

1 Route 3.
 2 So thank you very much.
 3 MR. COVER: Thank you.
 4 PAUL BOYER: My name is Paul Boyer. I'm here with
 5 our mayor and our former mayor from the City of
 6 Farmersville, and I also serve on the Council.
 7 The City has passed resolution and wanted to
 8 oppose Route 1 and support Route 3. I just want to go
 9 over some of the reasons for that here.
 10 First of all, we believe that the Draft EIR
 11 did not adequately address the visual effects on the
 12 interest of our communities from State Highway 198.
 13 This is what -- the first thing that people will see
 14 when they come through our community. We're trying to
 15 attract business. We're trying to get a tax base. And
 16 we think that this is not going to be a welcome entrance
 17 if the lines go in at that point.
 18 Another thing we believe was not adequately
 19 addressed was the land use impacts, where the proposed
 20 project would dramatically reduce our ability to market
 21 highway commercial and industrial development, which is
 22 the key to our viability as a city to have a tax base to
 23 provide base city services.
 24 And I think that it should be -- if you look
 25 at our options as a city to have this sort of a

PM-56
cont.

PM-57

PM-58

1 revenue-generating land use, this is the location. We
 2 don't have other choices. So we believe that needs to
 3 be looked at more.

4 The reason why this economic aspect is so
 5 important to us is that we're a poor community. We have
 6 one of the lowest median housing incomes of the city in
 7 the State -- in the United States.

8 Last census, we had just over 30 percent of
 9 our residents classified as living under the poverty
 10 level. About a quarter of our residents are farm
 11 workers, and about 20 percent of our residents right now
 12 are out of work.

13 The EIR took into account, for example,
 14 recreational opportunities. And we -- you know,
 15 recreation is important to us. Unfortunately, right now
 16 we only have about \$5,000 in our budget for a population
 17 of just over 10,000 for recreation. You see how low
 18 that is. That's not adequate. We need to have a tax
 19 base. And again, the effect of Route 1 on us is
 20 negative in our only option of having that sort of tax
 21 base.

22 Another item I would like to bring up is
 23 that we -- looking at the amount of land that has been
 24 discussed here as being taken from ag production, I
 25 don't think it takes into account the neighboring land



PM-58
cont.

PM-59

1 in, for example, cutting through parcels. And I think
 2 it's a lot more acres than were being discussed here.

3 And the reason why we not only are in
 4 opposition to Route 1 and opposed to Route 3 -- proposed
 5 Route 3 is that Route 3 has the least effect on
 6 agriculture. And that has an effect on our population,
 7 and we just can't afford more people out of work.

8 So again, we hope you look at all of these
 9 things in the value of the EIR. Thank you very much for
 10 all your work.

11 MR. COVER: Thank you.

12 Suzanne Farag.

13 SUZANNE FARAG: Hi. My name is Suzanne Farag, and
 14 I am a resident of Exeter, and I am a member of Foothill
 15 Bible Church. I guess I can kind of sum up. I've just
 16 been listening to all the comments tonight, and this is
 17 all I want to say.

18 It sounds to me that if SCE uses Route 2 or
 19 6, then our communities will dry up and blow away and
 20 there will be no need for the project anyway because
 21 there won't be any people.

22 MR. COVER: Thank you. That was the last comment,
 23 so that's a really good comment.

24 Did anybody turn in a comment card that I
 25 missed somehow? Anybody want to stay an extra half an

PM-59
cont.

PM-60

PM-61

1 hour?

2 Thank you so much. We really appreciate
3 your participation tonight in coming out and sharing
4 your comments with us. They are very valuable. And
5 again, we'll consider all these as we move forward.
6 Thank you.

7 And if you didn't sign in as you came in or
8 while you were here, you can sign in or sign out, I
9 guess the case is. I appreciate it. Thanks again.
10 Good night, everybody.

11
12 (Whereupon, at 9:30 p.m., public comments concerning
13 SAN JOAQUIN CROSS VALLEY LOOP
14 was concluded.)
15
16
17
18
19
20
21
22
23
24
25

1 STATE OF CALIFORNIA)

2) ss.

3 COUNTY OF TULARE)
4

5 I, Victoria L. Thomas, a Certified Shorthand
6 Reporter in the State of California, holding Certificate
7 No. 12927, do hereby certify that the foregoing.

8 Proceedings were taken Thursday, July 23,
9 2008, at the time and place set forth on the second page
10 hereof.

11 That upon the taking of the proceedings, the
12 words were written down by me in stenotype and
13 thereafter transcribed by computer under my supervision;
14 that the foregoing is a true and correct transcript of
15 the proceedings.

16 I further certify that I am neither
17 counsel for, nor in any way related to any party to said
18 action, nor in any way interested in the result or
19 outcome thereof.
20
21

22 _____
23 Victoria L. Thomas CSR No. 12927
24
25

CHAPTER 4

Master Responses

4.1 Master Response on Agricultural Issues

4.1.1 Introduction

Overview

This master response addresses the issues commenters raised concerning impacts to agricultural resources in the vicinity of the Proposed Project and alternatives. The Draft EIR, Section 4.2, *Agricultural Resources*, provides environmental setting information; an analysis of impacts to *Prime Farmland, Unique Farmland, and Farmland of Statewide Importance* (Farmland), as designated by the Farmland Mapping and Monitoring Program of the California Resources Agency; and an analysis of the project's compatibility and consistency with existing zoning for agricultural use and Williamson Act contracts. This Master Response provides additional information in response to commenter concerns that project-related impacts to irrigation infrastructure, existing wind machines, and dust impacts could result in conversion of Farmland to non-agricultural use. Appendix G contains the Final EIR version of Section 4.2, which includes an updated analysis of impacts in response to comments received on the Draft EIR, and all text changes made to the section. All numbers cited in this Master Response correspond with the numbers in Appendix G.

This master response is organized by the following subtopics:

- 4.1.2 Irrigation Systems
- 4.1.3 Wind Machines
- 4.1.4 Dust

Commenters

Commenters that addressed one or more of these topics include:

Individuals

- I14 Alan Hiatt
- I16 Terrance Peltzer
- I17 Bill and Peggy Pensar
- I25 Joseph Ferrara
- I30 Bob Hengst
- I39 Barbara Peltzer
- I40 Larry Peltzer
- I46 Lubbert VanDellen
- I47 Nancy VanDellen
- I54 Jay and Nancy Culter

- I66 William Pensar
- I75 James M. Gorden
- I79 John O. and Shirley B. Kirkpatrick
- I88 James K. Jordan
- I95 Robert Ward
- PM Eric Meling
- PM Doug Carman
- PM Tricia Stever
- PM John Kirkpatrick

Organizations/Agencies

- O2 Meling Bros.
- O3 Meling Bros.
- O5 Stone Corral Irrigation District
- O9 Sentinel Butte Mutual Water Company
- O11 Kaweah Lemon Company
- O12 Wallace Ranch Water Company
- O15 Rocky Hill Inc.
- O19 Paramount Citrus Association
- O20 California Farm Bureau Federation
- O23 Merryman Ranch Company
- O30 Lemon Cove Ditch Company

4.1.2 Irrigation Systems

Comment summary

This section of this master response responds to all or part of the following comments:

I14-4	I40-4	I75-4	O11-2	O19-14	PM 21
I16-3	I46-1	I75-12	O11-5	O20-3	PM 30
I17-3	I47-1	I79-3	O12-1	O20-14	PM 49
I25-2	I54-5	I88-1	O12-2	O20-19	PM 52
I25-3	I54-6	I95-2	O15-1	O20-20	
I30-1	I66-5	O5-1	O19-5	O23-1	
I39-1	I75-1	O9-2	O19-7	O30-1	

Summary of Issues Raised by Commenters

- Established irrigation systems may no longer be usable in certain areas if their location is incompatible with the location of the ROW. This may require farmers and/or water districts to relocate/redesign their existing irrigation systems, or force farmers to abandon sections of their land that cannot be practically or economically farmed.
- Relocating irrigation infrastructure (such as well/pump/filter stations, pressure pipelines, and other water conveyance infrastructure) would be extraordinarily expensive. Relocation could also be potentially infeasible due to water supply limitations (e.g. the need to obtain new easements from local private property owners), or engineering constraints (such as difficulties in reconfiguring gravity-delivery irrigation systems).
- Impact 4.2-5 should be changed from Class II to Class I because additional Farmland will be taken for new easements needed for replacing the water distribution system.
- Mitigation Measure 4.2-5 defers the issue of determining future irrigation system replacement needs to the project construction period and thereby does not fully and adequately identify of the project's future impacts to local farmers.

- The Draft EIR fails to evaluate the feasibility of accomplishing mitigation of impacts to irrigation systems. There is no documentation or analysis in the Draft EIR that demonstrates that impacted water systems can be modified or replaced to provide an adequate new water supply that will meet current water quality and quantity performance of their existing irrigation systems.
- The DEIR fails to identify the water delivery systems impacted within the Proposed Project ROW, the amount of water impacted, or the number of acres of citrus trees that would need to be removed for the irrigation system relocation.

Response

Water conveyance systems are an essential component of farming infrastructure for both irrigation and frost protection. As discussed under Impact 4.2-5 (page 4.2-16 of the Draft EIR), the Proposed Project could result in temporary or permanent removal, relocation, and/or replacement of irrigation infrastructure such as water pumps and irrigation pipelines. The agricultural resource impacts of the Proposed Project would be considered significant if existing irrigation infrastructure were impacted so that Farmland could no longer be used for agricultural purposes.

Potential project impacts to existing irrigation *conveyance and distribution* systems are discussed in this Master Response. Potential project impacts to the existing irrigation supply (e.g. water supply wells) are discussed in Master Responses 4.4, Groundwater, and 4.5, Wells.

Mitigation Measure 4.2-5 requires that SCE ensures that the existing irrigation infrastructure in the vicinity of the Proposed Project will remain functional both during and after project construction at the current service levels that farmers obtain from their existing irrigation systems. The Mitigation Measure may require SCE to implement re-routing and/or temporary irrigation systems for those farmers whose irrigation systems would be impacted by the Project. SCE will be responsible for ensuring that farmers' current levels of water are provided during and after project construction - individual landowners and local water irrigation districts will not be financially or physically responsible for implementing re-routing or temporary irrigation systems. SCE will coordinate with landowners during the development of construction plans, and SCE will be required to submit documentation to the CPUC demonstrating its coordination with landowners and Mitigation Measure 4.2-5 compliance.

As noted by several commenters, the Draft EIR, Section 4.2, *Agricultural Resources*, does not specify the water delivery systems within the ROW that would need to be removed and/or relocated or where new replacement water delivery systems would be located. The analysis also does not identify which, if any, citrus trees would need to be removed. Property specific impacts would be determined during the development of construction plans. Construction plan elements such as surveys, identification of any irrigation infrastructure impacted by the selected route, and final engineering of the Proposed Project would be completed prior to the commencement of project construction activities.

Commenters expressed concern that Mitigation Measure 4.2-5 defers the issue of irrigation system replacement to the project construction period - thereby postponing identification of

associated impacts which might result in insufficient mitigation being implemented. However, the issue of replacement of water systems would be addressed before the commencement of any construction activities. Property specific impacts are most appropriately determined during the construction plan development phase for the selected alternative when sufficient land survey data has been obtained and project design has been completed. Potential impacts associated with the replacement of irrigation systems are discussed in this Master Response, and they are considered less than significant.

As correctly noted by several commenters, it is possible that under certain circumstances some existing irrigation systems may no longer be usable if their location is incompatible with the project's ROW. However, as discussed above, farmers would not be responsible for modification or relocation of their impacted irrigation systems as SCE will be fully responsible for any necessary system redesign and construction. Furthermore, in order to satisfy Mitigation Measure 4.2-5, SCE must ensure that construction does not impact irrigation systems to a degree that farming practices cannot be maintained, and must ensure that existing levels of water are available to farmers during and after construction. Consequently, farmers would not be forced to abandon portions of their land. If SCE cannot meet this standard, the mitigation would be considered unmet and the project would need to be redesigned or adequate financial compensation would need to be provided to fully compensate the land owner for any such lost Farmland.

Commenters expressed general concern about the feasibility of implementing mitigation for impacts to irrigation infrastructure. Specific concerns on the feasibility of the mitigation measures include cost, the inability to find new sources of water of comparable quality and quantity, engineering issues (such as problems replicating gravity-delivery irrigation systems), the need to obtain new easements, and additional loss of Farmland as a result of new easements for alternate water supply and conveyance systems. Cost issues are not addressed as part of the CEQA analysis, and as such are not discussed in the Draft EIR or this Master Response except to reiterate that costs for temporarily or permanently relocating irrigation systems would be borne entirely by SCE and not landowners. For additional information on economic impacts from the Proposed Project, see the Master Response on Non-CEQA Issues (Section 4.7). The feasibility of locating new sources of water of comparable quantity and quality is a water supply issue, not a conveyance issue, and consequently is addressed in Master Response 4.5.

With respect to engineering-related feasibility concerns, SCE and/or its contractors would be required to develop re-routing and/or temporary irrigation systems. SCE would use in-house engineers or contracted engineers to develop systems specific to the impacted area using current technology. Consequently, no engineering feasibility constraints in conveying water from one location to another may be expected. Concerns regarding the potential need to obtain new easements for irrigation infrastructure across private property are speculative. If new easements are required, SCE would be responsible for negotiating with landowners and ensuring that the water system maintains its integrity. Furthermore, new easements would not convert Farmland to non-agricultural use, as easements are compatible with agriculture. Consequently, Impact 4.2-5 would remain less than significant with mitigation (Class II).

4.1.3 Wind Machines

Comment summary

This section of this master response responds to all or part of the following comments:

O2-1	O19-5	PM 22
O3-5	O23-1	PM 29

Summary of Issues Raised by Commenters

- The Proposed Project or an alternative would require the relocation of wind machines used for frost protection of orchard crops. Loss of frost protection capabilities could result in damage to fruit and trees in surrounding orchards, making farmers' ability to maintain orchards difficult and perhaps infeasible.

Response

Wind machines are considered ancillary farming systems. Therefore, potential impacts to Farmland resulting from the removal of wind machines would fall under Impact 4.2-5 in the Draft EIR (page 4.2-16). The following text from Section 4.2, *Agricultural Resources*, has been changed (Draft EIR page 4.2-16, Impact 4.2-5, first paragraph) to clarify the inclusion of wind machines within the scope of Impact 4.2-5:

The Proposed Project could result in temporary or permanent removal, relocation, and/or replacement of ancillary farming systems such as water pumps, irrigation pipelines, wind machines, and gas lines.

Accordingly, Mitigation Measure 4.2-5 (page 4.2-16) would apply to the removal of wind machines. Per the mitigation, SCE would be required to coordinate with landowners to ensure that project construction does not impact wind machines to a degree that farming practices cannot be maintained. Impacts would remain less than significant with mitigation.

4.1.4 Dust

Comment summary

This section of this master response responds to all or part of the following comments:

I16-3	O20-14
O20-2	O20-19

Summary of Issues Raised by Commenters

- The Proposed Project and alternatives would generate dust during construction and during maintenance of transmission facilities. Vehicles on unpaved access roads and within the ROW would generate dust, which may act as a carrier for pests and diseases including

California Red Scale, Spider Mites and Thrips. Where private ranch roads are used as access roads it will be extremely difficult to monitor the speed of the traffic or who uses the roads. The Draft EIR does not adequately address the impacts to the various crops located adjacent to the ROW or the access roads resulting from operation and maintenance of the transmission line.

- The mitigation measures recommended in the Draft EIR, Section 4.3, *Air Quality*, to reduce dust emissions may create additional impacts for agricultural crops (see Mitigation Measures 4.3-1b and 4.3-3). Agricultural operations are subject to strict regulations regarding chemical use. Materials appropriate for dust suppression may not be appropriate near food production. Vegetation as a suppressant, unless properly managed, can create ancillary problems to crop production, such as weed propagation.

Response

Operation and maintenance of the transmission lines can generate dust from both authorized and unauthorized vehicles using access and spur roads, and also from any exposed buffer land. Dust generated in close proximity to agriculture can be detrimental to crop productivity since it can act as a carrier for pests and disease. Unauthorized vehicular access on new access and spur roads would be controlled by the installation of gates where required at fenced property lines (see Chapter 2, *Project Description*). Dust emissions on new access and spur roads from operations and routine maintenance would only occur periodically during inspection activities and the re-grading of roads. These activities are expected to occur on an infrequent basis, and would represent an incremental increase in dust emissions in the area.

Furthermore, Section 4.3, *Air Quality*, addresses the potential for the Proposed Project to result in permanently disturbed land that would serve as a new source of fugitive dust emissions. Mitigation Measure 4.3-3 (Draft EIR page 4.3-20) requires SCE to utilize dust control measures during operation of the project to minimize emissions from permanently disturbed land and new access and spur roads. Commenters expressed concern that while Mitigation Measure 4.3-3 would reduce air quality impacts, it would have the potential to negatively impact crops on adjacent Farmland. For example, the use of some chemical dust suppressants may not be appropriate near agricultural operations that are subject to strict regulations regarding chemical use. In addition, vegetation used as a suppressant might have the potential to propagate weeds. However, Mitigation Measure 4.3-3 was modified in response to Comment O24-68. The following text has been changed (Draft EIR page 4.3-20):

Mitigation Measure 4.3-3 ~~includes~~ is adapted from measures recommended by the SJVAPCD to help mitigate fugitive PM10 and PM2.5 emissions from open areas. Implementation of this measure would reduce impacts to less than significant.

Mitigation Measure 4.3-3: After construction, SCE shall, ~~in perpetuity during operation of the project,~~ utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions from permanently disturbed land operations and maintenance clearance areas around poles and towers, and from new access and spur roads:

- Apply and maintain water ~~or dust suppressants~~ to all un-vegetated areas; or
- Establish ~~native~~ landowner-approved vegetation that is compliant with SCE line clearance requirements ~~on all previously disturbed areas~~; or
- Apply and maintain landowner-approved surface treatments (e.g., gravel or crushed stone) ~~gravel or apply and maintain chemical/organic stabilizers/suppressants to all open areas.~~

As shown above, the use of chemical/organic stabilizers/suppressants is no longer included in the mitigation, which relies on land-owner approved vegetation and surface treatments to minimize dust. Because chemical dust suppressants would no longer be used, and because all vegetation would be approved by landowners, potential impacts from chemical contamination and weed propagation would be reduced to less than significant.

To address chemical and weed-related concerns for the construction phase of the project, the following text has been added to the end of Mitigation Measure 4.3-1b (Draft EIR page 4.3-20, top of page):

Chemical stabilizers/suppressants used in proximity to agricultural areas must be approved by the Tulare County Farm Bureau, to ensure their use is compatible with nearby crops.

4.2 Master Response on Cultural Resources

4.2.1 Introduction

Overview

This master response addresses the issues commenters raised concerning impacts to cultural resources in the vicinity of the Proposed Project and alternatives. The Draft EIR, Section 4.5, *Cultural Resources*, provides environmental setting information; an analysis of impacts to *historical resources, archaeological resources, human remains, and paleontological resources*. This Master Response provides additional information in response to commenter concerns about impacts to cultural and Native American resources.

This master response is organized by the following subtopics:

4.2.2 Native American Burial Grounds and Other Archaeological Resources Along Routes 2 and 6

4.2.3 Yokut Sacred Lands within the Project Area

4.2.4 Alternatives 2 and 6 Would Pass through the “Valley of the Sun” Pageant Site

Commenters

Commenters that addressed one or more of these topics include:

- I3 Jenna Mattison
- I6 Robert and Mary Edmiston
- I13 Elaine Breitbach
- I14 Alan Hiatt
- I24 Melissa Deitz
- I33 Linda Hengst
- I43 Randy Redfield
- I46 Lubbert Van Dellen
- I47 Nancy Van Dellen
- I76 Mary Gorden
- I77 Courtney Hengst
- O19 Paramount Citrus Association

4.2.2 Native American Burial Grounds and Other Archaeological Sites Along Routes 2 and 6

Comment summary

This section of this master response responds to all or part of the following comments:

I3-1	I33-1	I43-3	I47-3	I76-6
I14-5	I43-2	I46-3	I76-3	

Summary of Issues Raised by Commenters

- Commenters are concerned about the presence of “Indian Burial grounds” along Alternative Routes 2 and 6.

- Commenters are concerned about impacts to “early pioneer sites” along Routes 2 and 6.
- The area around Sentinel Butte is described by commenters as sensitive for prehistoric sites, as evidenced by sites in that area containing grinding stones, petroglyphs, and a burial ground that was excavated by the College of the Sequoias.

Response

The commenters expressed general concern about impacts to historic and archaeological resources within the project area, particularly to Native American burial sites along Routes 2 and 6. Commenters are referred to Draft EIR Section 4.5.1, *Methods and Results* (pages 4.5-11 through 4.5-17), which summarize the archival and field studies undertaken in support of the project.

As described in Section 4.5.1, an Archaeological Survey Report (Armstrong and Jackson, 2008) was prepared that consisted of a records search at the Southern San Joaquin Valley Information Center (of the California Historical Resources Information System), literature review, Native American contact, and field reconnaissance. The Draft EIR lists the cultural resources identified during the records search and field visits for each alternative. All of the historic and archaeological resources identified by the commenters were addressed in the Draft EIR.

Several commenters specifically drew attention to the prehistoric and historic-era cultural resources around the Sentinel Butte area, at the far eastern tip of the shared portion of Alternatives 2 and 6. As stated in Section 4.5.1 of the Draft EIR, this portion of the project area was subject to systematic archaeological survey and seven sites were identified within ¼ mile of this portion of the alignment, two of which may be within the alignment for Alternatives 2 and 6. The Draft EIR includes Mitigation Measures 4.5-2a (creation of a Historic Properties Treatment Plan for impacted historic resources) and 4.5-4a (identification, evaluation, and treatment of archaeological resources) to mitigate impacts to known resources. Mitigation Measures 4.5-2b (additional cultural resources survey) and 4.5-4b (cease work if cultural resources are uncovered during project implementation) address the inadvertent discovery of cultural resources.

The discussion of Alternative 6 in the Draft EIR only described that portion of Alternative 6 that is not shared by Alternative 2. The shared portions of Alternative 2 and 6 have been surveyed and some cultural resources identified. The text on page 4.5-15 has been clarified to read:

According to the SSJVIC records search, ~~seven one cultural archaeological resources and six historic resources~~ were previously recorded as being within 0.5 miles of Alternative 6. ~~Cultural resource CA-TUL-1976 is a large prehistoric site with extensive bedrock milling features, midden, and pictographs. It does not appear to be within the Alternative 6 alignment. All of these previously recorded sites are prehistoric milling stations or occupational sites. None of these sites appear to be within the Alternative 6 alignment.~~

The portions of Alternative 6 that are shared with Alternative 2 have been subject to systematic pedestrian archaeological survey; however, ~~N~~no archaeological survey has yet been conducted for the rest of the proposed ROW for Alternative 6.

During the 2007 field survey of the portions of Alternative 6 that are shared with Alternative 2, thirteen other cultural resources were recorded within the 200- to 300-foot-wide survey corridor, including nine that are located in the Alternative 6 alignment and may be impacted. These are PL-1, PL-2, PL-7, PL-9, PL-10, PL-13, PL-15, PL-30 and PL-42, described above. Two of the six historic resources, PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal), are within the Alternative 6 alignment.

The text on page 4.5-31 has been clarified to read:

Other than the BCHSHD, ~~two~~ seven built historic resources are within the Alternative ~~36~~ alignment that may be impacted by construction, which is ~~three fewer~~ two more known historic resources than would be in the Proposed Project alignment.

Impact 4.5-ALT6-1: Implementation of Alternative 6 could adversely affect known and unknown historic resources along the Alternative 6 alignment. *Less than significant with mitigation* (Class II)

There are ~~six~~ seven historic resources located ~~within 0.5 miles of Alternative 6. Two of these, PL-30 (Cameron Creek Channel) and PL-42 (Tulare Irrigation Canal), are historic built resources and~~ within the Alternative 6 ROW: PL-2 (Matthews Ditch), PL-7 (St. John's River Levee), PL-9 (Watchumna Ditch), PL-10 (Mill Creek Levees), PL-15 (Remains of a historic ranch house), PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal). In addition, previously unknown historical resources may be present within portions of the Alternative 6 ROW, ~~which has~~ that have not been surveyed for cultural resources.

The text on pages 4.5-31 to 4.5-32 has been clarified to read:

~~There is one known archaeological resource~~ are nine archaeological resources within 0.5 miles of the Alternative 6 ROW. ~~This resource, CA TUL-1976, is not within the Alternative 6 ROW. However, most~~ Much of the Alternative 6 alignment has never been archaeologically surveyed, and a greater portion of Alternative 6 runs through the more sensitive foothill areas than the Proposed Project. In addition, Alternative 6 runs through less developed land and therefore may contain a greater number of unrecorded archaeological resources.

Impact 4.5-ALT6-2: Implementation of Alternative 6 could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation* (Class II)

~~While no archaeological resources are present within the Alternative 6 alignment, one resource, CA TUL-1976, lies less than 0.5 miles from the alignment. There are nine~~ archeological resources recorded within 0.5 miles of the Alternative 6 alignment. Two of these, PL-1 (historic debris scatter), and PL-13 (Prehistoric bedrock milling site), could potentially be located within the Alternative 6 project area. To determine whether these resources would be impacted by project construction, the location of the sites would have to

be identified and mapped as described in Mitigation Measure 4.5-ALT6-2a, below. If these resources are within the Alternative 6 project area, they could be adversely impacted by construction activities.

4.2.3 Yokut Sacred Lands within the Project Area

Comment summary

This section of this master response responds to all or part of the following comments:

I6-6	I24-1
I13-6	I76-3

Summary of Issues Raised by Commenters

- Commenters are concerned that the project may traverse land of special value to Yokuts Indians.
- In particular, commenters point out that the Antelope Valley, through which Alternatives 2 and 6 would pass, is known to the Yokuts as their sacred creation place.

Response

The Draft EIR preparers acknowledge the sensitivity of portions of the project area to Native Americans. Commenters are referred to Draft EIR Section 4.5.1, *Methods and Results* (specifically pages 4.5-12 and 4.5-13), which summarizes the Native American consultation undertaken for this project. A formal request was sent to the Native American Heritage Commission (NAHC) in November 2005 and April 2007, requesting a search of their Sacred Lands File (SLF) for any known traditional cultural properties within or near the Proposed Project alignment. The NAHC responded that there were no known sacred sites within the Proposed Project area. In January 2008, a search of the SLF was requested for the Proposed Project and alternatives. The NAHC responded that there were sacred sites within the project area, but could not specify whether the sites were located near the Proposed Project or an alternative. In April 2009, a search of the SLF was requested for Alternative 6. The NAHC responded that no sacred sites were located within the Alternative 6 project area. Consultation between SCE and representatives of local Native American groups is ongoing.

4.2.4 Alternatives 2 and 6 Would Pass through the "Valley of the Sun" Pageant Site

Comment summary

This section of this master response responds to all or part of the following comments:

I33-1	I77-1
I43-2	O19-21

Summary of Issues Raised by Commenters

- Commenters are concerned that Alternatives 2 and 6 would traverse the site of the “Valley of the Sun” pageant, which was held in 1926 at the Sentinel Butte Ranch

Response

The commenters are referred to Draft EIR Section 4.5.1, *Methods and Results* (pages 4.5-11 through 4.5-17), which summarizes the archival and field studies undertaken in support of the proposed project. As described in that section, an Archaeological Survey Report (Armstrong and Jackson, 2008) was prepared that consisted of a records search at the Southern San Joaquin Valley Information Center (of the California Historical Resources Information System), literature review, Native American contact, and field reconnaissance. The Draft EIR lists the cultural resources identified during the records search and field visits.

As stated in Section 4.5.1 of the Draft EIR, the portion of the project area near Sentinel Butte was subject to systematic archaeological survey. Site PL-15, the remains of a barn and other ranching features, was identified. The Draft EIR includes Mitigation Measure 4.5-ALT2-1a (for Alternative 2) and Mitigation Measure 4.5-ALT6-1a (for Alternative 6), which requires that the Applicant develop a Historic Properties Treatment Plan (HPTP) for impacted historic resources to mitigate impacts to known historic resources. The HPTP would address the site of the Valley of the Sun Pageant and the potential relationship of site PL-15 to Sentinel Butte Ranch.

4.3 Master Response on Electric and Magnetic Fields

4.3.1 Overview

This master response addresses issues raised by commenters related to Electric and Magnetic Fields (EMF) that would be generated by the project. The majority of EMF issues raised are related to concerns about EMF directly affecting human health, including the potential to cause cancer and other life threatening diseases. Southern California Edison (SCE) also provided several comments expressing the view that it is not appropriate for any EMF related discussion to be within the body of the EIR given the lack of scientific consensus that EMF causes direct human health issues.

The Draft EIR Project Description (see Section 2.9, *Electric and Magnetic Fields Summary*) and Appendix B, *Electric and Magnetic Fields*, provide background and project-related information on EMF. This master response provides a summary of the CPUC's position related to EMF analysis in CEQA documents and offers several points of clarification related to the Draft EIR EMF discussions.

4.3.2 Commenters

Commenters that addressed this topic include:

Individuals

- I26 Joyce Frazier
- I35 Tom & Jennifer Logan
- I40 Larry Peltzer
- I46 Lubbert Van Dellen
- I53 Stacey Kelch
- I69 Diane Heaton
- I83 Hudson Rose
- I89 Robert Bennett Lea III
- I94 Tami Tarbell-Lea
- I95 Robert Ward

Organizations

- O24 Southern California Edison
- O25 Schute, Mihaly & Weinberger LLP (representing the City of Visalia)

4.3.3 EIR Discussion of Electric and Magnetic Fields

Comment summary

This master response responds to all or part of the following comments:

I26-3	I53-3	I89-1	O24-3
I35-2	I69-1	I94-1	O24-18
I40-7	I83-1	I95-4	O25-3
I46-5			

Summary of Issues Raised by Commenters

- Concerns about project-related EMF exposure directly affecting the health of farm workers and residents in close proximity to the ROW, including the potential for EMF to cause cancer and other life threatening diseases.
- Issues related to EMF should not be discussed within the main body of the EIR.

Response

Several commenters expressed concern regarding EMF exposure and potential links to health conditions, such as cancer and leukemia. However, this EIR does not consider EMF in the context of the CEQA analysis of potential environmental impacts because there is no agreement among scientists that EMF creates a potential direct health risk, and there is no defined or adopted CEQA standards for defining health risk from EMF. However, recognizing that there is a great deal of public interest and concern regarding potential direct health effects from human exposure to EMF from transmission lines, information is provided in Draft EIR Section 2.9 and Appendix B related to electric utility facility generated EMF and potential direct links to human health and safety. This information is presented for the benefit of the public and decision makers.

It should be noted that based on the findings of a working group of interested parties known as the California EMF Consensus Group, and written testimony and evidentiary hearings, the CPUC issued a decision (D.06-01-042) in 2006 to address public concern about possible EMF related health effects from electric utility facilities, such as those expressed in some of the comments on the Draft EIR. The conclusions and findings of CPUC Decision 06-01-042 included the following:

- The body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure.
- It is not appropriate to adopt any specific numerical standard in association with EMF until there is a firm scientific basis for adopting any particular value.

One of the measures specifically required by the decision is directly applicable to the Proposed Project because it required SCE to develop and identify in its application no-cost and low-cost steps to reduce EMF levels along the project corridor. The measure requires utilities to take no-cost and low-cost measures where feasible to reduce exposure from new or upgraded utility facilities. It requires that no-cost field reduction measures be undertaken, and that low-cost options be implemented through the project certification process. Four percent of total project budgeted cost is the benchmark in developing EMF field reduction guidelines, and field reduction measures should achieve some noticeable reductions. Refer to Draft EIR Section 2.9.2 for the no-cost and low-cost magnetic field reduction measures that SCE has committed to implementing as part of the Proposed Project.

SCE provided several comments that are critical of Draft EIR for containing EMF related information within the body of the document, given that direct effects to public health due to

EMF exposure have not been substantiated by the scientific community. In fact, SCE expressed concern related to several references to “mitigation measures” on Draft EIR Appendix B pages 3 and 4 and requested that the references be revised to “field reduction measures” to not confuse the EMF measures with CEQA mitigation measures. Therefore, to avoid any such confusion, the following edits has been made to the third, fourth, and fifth EMF reduction items on pages 3 and 4 of Draft EIR Appendix B.

3. ~~Mitigation~~ Field reduction measures should not compromise the reliability, operation, safety or maintenance of the system.
4. Total cost of ~~mitigation~~ field reduction measures should not exceed approximately 4 percent of the total cost of the Project.
5. ~~Mitigation~~ Field reduction measures should have a noticeable reduction in the magnetic field level at the edge(s) of the right-of-way approximately 15 percent or more.

It should be noted that the draft EIR does not consider EMF in the context of the CEQA analysis of potential environmental impacts because [1] there is no agreement among scientists that EMF creates a potential health risk, and [2] there are no defined or adopted CEQA standards for defining health risk from EMF. However, studies that have been conducted on EMF effects on the physical functioning of surgically implanted medical devices, such as pacemakers and defibrillators, are not considered inconclusive. Therefore, the effects of EMF on surgically implanted devices are addressed under Impact 4.7-10 in Section 4.7, *Hazards and Hazardous Materials*.

4.4 Master Response on Groundwater

4.4.1 Introduction

Overview

This Master Response addresses the following general concern:

- Pole installation (i.e., the excavation of permanent holes up to 10 feet in diameter and up to 60 feet deep) would impact groundwater levels and flow. Subsequently, this would negatively impact the productivity of existing wells.

Commenters

Commenters that addressed one or more of these topics include:

Individuals

- I6 Robert and Mary Edmiston
- I10 James Hitchcock
- I13 Elaine Breitbach
- I21 Chris Corbett
- I36 Leroy and Sandy Maloy
- I42 Karen Redfield
- I43 Randy Redfield
- I51 Douglas and Kaye Rydberg
- I54 Jay and Nancy Cutler
- I81 Arturo Ramirez
- I87 Bill Ferry

Organizations/Agencies

- O5 Stone Corral Irrigation District
- O18 AMEC
- O19 Baker Manock & Jensen
(representing Paramount Citrus Association)
- O29 Tulare County Board of Supervisors

Comment summary

This Master Response responds to all or part of the following comments:

I6-1	I42-1	I87-1	O18-5	O19-20
I10-1	I43-1	O5-3	O18-6	O29-1
I13-1	I51-1	O18-1	O19-16	
I21-2	I54-3	O18-2	O19-18	
I36-1	I81-1	O18-4	O19-19	

4.4.2 Response

In general, the majority of comment letters expressing concern over potential impacts to groundwater levels and flow do not describe how (i.e., by what mechanism) such an impact would occur. Therefore, to this end, it is not feasible to develop a specific response but only to reiterate that, beyond those impacts discussed in Section 4.8, *Hydrology and Water Quality*, the Proposed Project would not have any potential impacts upon hydrology and water quality (including groundwater resources). A few of the comment letters state, in varying levels of detail, that impacts to groundwater levels and flow could occur if the Project would effect strata within the aquifer zone or seal groundwater flowpaths within bedrock; these mechanisms are not considered potential impacts for the following reasons: the alluvial aquifer underlying the project area is very large (in surface area) and deeper than 60 feet, the vast majority of existing groundwater wells in the Project area are completed to depths greater than 60 feet, the regional hydraulic gradient and flow patterns have already been dramatically altered by well installation and pumping over the last half century, and the notion that pole installation could substantially impact groundwater flow within bedrock is speculative and improbable. Further, the commenters are reminded here that the excavated holes would be backfilled with concrete, which is essentially the same method (i.e., backfilling with concrete) required in California to seal the hole and prevent it from functioning as a conduit for groundwater flow whenever an existing well is decommissioned or destroyed (DWR, 1991).

Though the hydraulic properties can vary notably (as can well yields), primarily driven by the variability in the texture of the aquifer material (e.g., coarse- vs. fine-grained), the alluvial aquifer underlying the project area is best described as a single heterogeneous system comprised of a contiguous body of water (Williamson et al., 1989; Bertoldi et al., 1991; Faunt, 2009). In short, the prevailing concept is that the entire thickness of the sedimentary deposits is one aquifer system that has varying vertical leakage and confinement depending upon the presence and properties of fine-grained sediments (e.g., clay lenses). Most of the fine-grained material occurs at depths greater than 60 feet in the project area (Page, 1986) and, as such, the accumulation and presence of fine-grained lenses from the surface down to 60 feet is unlikely. Based upon review of published reports and other relevant information, no evidence was found to suggest that one or more shallow aquifer zones exist within the Project area that are less than or equal to 60 feet in depth.

The majority of existing wells within the Project area are greater than 60 feet in depth and are thus accessing groundwater that would be below and not influenced by the holes excavated for pole installation. The range of municipal and irrigation well depths within the Kaweah Subbasin is generally 100 to 500 feet (DWR, 2004). Further, well depths in the entire San Joaquin Valley are reported to range from about 100 to 3,500 feet (Bertoldi et al., 1991). For a study area within the San Joaquin Valley, Bull and Miller (1975) described “shallow” wells as those between 100 and 250 feet in depth.

The regional groundwater gradients and flow patterns in the southern San Joaquin Valley have already been dramatically altered by prolific well installation and pumping over the last half century; the conceptual, incremental impact of pole installation on these same processes would be

negligible at most. Over-pumping has resulted in a decrease in the hydraulic head (i.e., the pressure surface, or piezometric surface) in the lower aquifer zones, which has subsequently increased the rate at which groundwater moves from the upper portions of the aquifer to the lower zones (Bertoldi et al., 1991). Further, groundwater wells themselves serve as conduits for groundwater to move between different aquifer zones (e.g., by way of the permeable sand/gravel filter pack, and also when not actively pumping). Wells in the southern San Joaquin Valley, including within the project area, have dramatically increased the rate at which groundwater moves from upper zones to lower zones within the aquifer (Croft and Gordon, 1968; Williamson et al., 1989; Bertoldi et al., 1991; Faunt, 2009). Calculations indicate that if large-diameter wells perforated over a long interval are evenly distributed, the vertical leakage of one well is about the same as that of the fine-grained beds in about seven square miles of the aquifer system (Bertoldi et al., 1991). Therefore, in areas with many wells, the vertical flow of groundwater has been and continues to be substantially altered.

With respect to the potential for disrupting or sealing (i.e., with concrete) groundwater flowpaths within bedrock, and subsequently negatively impacting existing groundwater wells, it is speculative and highly improbable that the Proposed Project would produce such an impact. Firstly, as stated above, most wells in the project area are deeper than 100 feet below ground surface (bgs) and a 60 foot borehole would have no impact or influence upon such wells. Secondly, within the eastern extent of the project area (where existing wells may be completed in bedrock), regional groundwater gradients and flow characteristics would be unaffected by the installation of the pole foundations.

Within the eastern half of the project area, particularly within the small, inter-montane valleys in the foothills, it is acknowledged that many groundwater wells are directly accessing water within bedrock (or, indirectly, water originally issuing from bedrock and being stored in alluvium). Though, concerning hydraulic relationships, flow within bedrock is more complicated than flow within alluvium, it nonetheless should be conceptualized simply as another flow medium in-lieu of more site-specific information. Groundwater flow is governed by pressure gradients (i.e., flow moves from areas of high hydraulic head to low hydraulic head) and, in the eastern foothill area, the pressure gradient is largely driven by the rate and location of recharge higher up in the Sierra Nevada (i.e., recharge from snowmelt and runoff). The pole foundations would be inconsequential to the pressure gradient and the flow of groundwater along the eastern extent of the project area (i.e., groundwater would still flow from existing areas of recharge to existing areas of discharge, including to areas where groundwater wells have been installed). Further, the productive fracture zones are likely larger in cross-section than the relatively small area represented by a pole foundation. If a well is producing water within a fracture zone, it is very likely that such a well is fed by many continuous and discontinuous fractures in an array of orientations; the likelihood that such a well is fed by a single, continuous fracture that could be sealed, and subsequently the existing groundwater flow to the well would essentially cease, runs contrary to the understanding and conceptualization of fracture-flow hydrogeology. The commenters' inference that a pole foundation could completely disrupt the direction and rate of flow within a small fracture zone that happens to be the same size and depth as the pole foundation and which also happens to be the sole (or primary) source of water for a given well is speculative and highly improbable.

4.4.3 References (not cited in DEIR)

- Bertoldi, G.L., R.H. Johnston, and K.D. Evenson, 1991. Ground Water in the Central Valley, California – A Summary Report. U.S. Geological Survey Professional Paper 1401-A, 44 p.
- Bull, W.B., and R.E. Miller, 1975. Land Subsidence Due to Ground-Water Withdrawal in the Los Banos-Kettleman City Area, California, Part 1. Changes in the Hydrologic Environment Conducive to Subsidence. U.S. Geological Survey Professional Paper 437-E, 71 p.
- California Department of Water Resources (DWR), 1991. *California Well Standards*. DWR Bulletin 74-90, June 1991.
- Croft, M.G., and G.V. Gordon, 1968. Geology, Hydrology, and Water Quality of Water in the Hanford-Visalia Area, San Joaquin Valley, California. U.S. Geological Survey Open-File Report 68-67, April 10, 1968, 63 p.
- Faunt, C.C., ed., 2009. Groundwater Availability of the Central Valley Aquifer, California. U.S. Geological Survey Professional Paper 1766, 225 p.
- Page, R.W., 1986. Geology of the Fresh Ground-Water Basin of the Central Valley, California, with Texture Maps and Sections. U.S. Geological Survey Professional Paper 1401-C, 54 p.
- Williamson, A.K., D.E. Prudic, and L.A. Swain, 1989. Ground-Water Flow in the Central Valley, California. U.S. Geological Survey Professional Paper 1401-D, 127 p.

4.5 Master Response on Wells

4.5.1 Introduction

Overview

This Master Response addresses the following general issues:

- With respect to Mitigation Measure 4.7-11b, if it is necessary to relocate an existing well, it may be difficult to find a location that would produce water of equal quantity and quality. Simply relocating an existing well does not guarantee that the new well location would produce an adequate amount of water with respect to the existing land use.
- With respect to Mitigation Measure 4.7-11b, it would be neither feasible nor possible to relocate an existing wagon-wheel type well (i.e., an older style/type of well in which a large diameter well has been sunk and a number of lateral holes have been drilled for directing groundwater into the main well area). Safety rules promulgated by the California Division of Occupational Safety and Health (Cal OSHA) no longer allow for installation of such wells.

Commenters

Commenters that addressed one or more of these topics include:

Individuals

- I4 Larry Ronk
- I6 Robert and Mary Edmiston
- I9 Barbara VanWellen
- I13 Elaine Breitbach
- I14 Alan Hiatt
- I16 Terrance Peltzer
- I25 Joseph Ferrara
- I27 Jose Luis and Rose Ann Guttierrez
- I30 Bob Hengst
- I34 Tammi Hitchcock
- I37 George McEwen
- I39 Barbara Peltzer
- I40 Larry Peltzer
- I43 Randy Redfield
- I46 Lubbert Van Dellen
- I47 Nancy Van Dellen
- I51 Douglas and Kaye Rydberg
- I54 Jay and Nancy Cutler
- I60 Doyle Ritchie
- I75 James Gordon
- I79 John O. and Shirley B. Kirkpatrick
- I83 Hudson Rose
- I88 James Jordon
- I93 Mike and Sharon Potts
- I95 Robert Ward
- PM Eric Meling
- PM Tom Logan
- PM Scott Belknap
- PM Tricia Stever

Organizations/Agencies

- O3 Meling Bros
- O5 Stone Corral Irrigation District
- O8 Kenneth D. Schmidt and Associates (Groundwater Quality Consultant for PACE)
- O9 Sentinel Butte Mutual Water Company
- O11 Kaweah Lemon Company
- O12 Wallace Ranch Water Company

- O14 CJ Hammers Pump Company
- O16 PACE
- O18 AMEC
- O19 Baker Manock & Jensen
(representing Paramount Citrus
Association)
- O20 California Farm Bureau
Federation and Tulare County Farm
Bureau

Comment summary

This master response responds to all or part of the following comments:

I4-1	I34-9	I75-2	O11-5	O19-20
I6-1	I37-3	I75-4	O11-6	O20-5
I9-1	I39-1	I79-3	O12-2	O20-19
I13-1	I40-4	I83-1	O14-1	O20-20
I14-4	I43-1	I88-1	O16-2	PM 21
I16-4	I46-1	I93-1	O18-1	PM 35
I25-1	I47-1	I95-2	O18-5	PM 40
I25-2	I51-5	O3-3	O19-5	PM 49
I27-1	I54-4	O5-4	O19-17	
I30-1	I60-1	O8-1	O19-18	
I34-1	I75-1	O9-1	O19-19	

4.5.2 Response

In order to address the commenters' concerns and to ensure that Mitigation Measure 4.7-11b adequately mitigates the Proposed Project's potential impact to existing groundwater wells, Mitigation Measure 4.7-11b has been clarified as follows:

Mitigation Measure 4.7-11b: Prior to construction, SCE shall coordinate with affected property owners to conduct an inventory of the groundwater wells (including wagon-wheel type wells) that are within the proposed ROW. To the extent feasible, SCE shall adjust the proposed ROW such that the centerline of the ROW shall be no closer than 50 linear feet from any existing well. Where adjusting the ROW is not feasible (either technically or economically), SCE shall proceed as follows:

Wagon-Wheel Wells. It would not be feasible to, and Cal OSHA regulations would not permit one to, install or relocate a wagon-wheel type well. For this reason, SCE shall adjust the spacing and/or height of adjacent tower or pole structures to provide sufficient vertical clearance such that well maintenance activities may be safely conducted on any wagon-wheel well within the ROW. Safe working clearances shall be determined as identified in Cal OSHA Title 8 of the California Code Section 2946, considering the maximum line sag at the well location(s) as well as the minimum height of equipment (e.g., boom trucks) that would be required to perform well maintenance activities.

Other Groundwater Wells. Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the maximum line sag at the well locations as well as the minimum height of equipment (e.g., boom trucks) that would be required to perform well maintenance activities, SCE shall

identify wells that would not have the required minimum ~~ground~~ vertical clearance to safely perform any necessary well maintenance and that could not be provided with adequate vertical clearance by adjusting the spacing and/or height of adjacent tower or pole structures. ~~and~~ For those wells where adequate vertical clearance is not feasible (either technically or economically), SCE shall engage a ~~qualified water well drilling contractor~~ well driller licensed in the State of California (C-57 Well Driller's License) to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location.

Prior to well relocation, it shall be demonstrated that the new location is capable of producing water of equal quantity and quality. For the existing well a steady-state pump test shall be conducted, once in February or March and once in early October (prior to well relocation), to determine the existing average yield of the well. Also, water quality testing of the existing well shall be performed after each of the pump-tests. Measured water quality parameters shall include pH, total suspended solids (TSS), total dissolved solids (TDS), and nitrates. Equivalent water quantity and quality testing (i.e., same tests, performed once in February or March and once in early October) shall be performed, using a properly installed, temporary monitoring well, at the new prospective well location. The average yield and water quality at the new prospective well location shall be at least equal to (if not better than) the existing well location; such a comparison shall be made based upon the testing specified in this mitigation measure. If the yield and quality at the new prospective well location are demonstrated to be at least equivalent to the existing well location, then a permanent well shall be installed at the new location; otherwise, a new prospective well location shall be identified and the same testing procedures shall be repeated until an adequate location is identified. All testing shall be conducted or overseen by a California-registered hydrogeologist. A report summarizing all water quantity and quality testing shall be submitted by a California-registered hydrogeologist to the California Public Utilities Commission and otherwise be made publicly available. The report shall include a detailed description of testing approach, methodology, duration, and results. Abandonment of ~~the old existing~~ wells shall be conducted in accordance with all applicable well standards (DWR, 1991). All wells shall be relocated prior to electrifying the transmission line.

4.6 Master Response on Alternatives

4.6.1 Introduction

Overview

This master response addresses those issues raised by commenters that concern the identification and analysis of alternatives. Draft EIR Section 3, *Alternatives and Cumulative Projects*, provides a description of how alternatives were identified and screened. Specifically, Section 3.1 provides an overview of the alternatives screening process; Section 3.2 describes the methodology used for alternatives evaluation; Section 3.3 presents a summary of which alternatives were selected for full EIR analysis and which were eliminated based on CEQA criteria; Section 3.4 describes the alternatives that were retained for full EIR analysis, including the No Project alternative; and Section 3.5 provides a description of each alternative that was eliminated from EIR analysis and explains why each was eliminated.

This Master Response provides additional clarification to those commenter questions specifically raising issues associated with alternatives. Many commenters expressed a preference for one alternative over another without providing a specific comment regarding the adequacy of the environmental analysis in the Draft EIR. This master response is organized by the following subtopics:

- 4.6.2 Application of the Garamendi Principles
- 4.6.3 Favors Alternative 3 or 3A

Commenters

Commenters that addressed one or more of these topics include:

Individuals

- I1 Dr. and Mrs. David Bockman
- I3 Jenna Mattison
- I4 Larry Ronk
- I5 Robert McKellar
- I6 Robert and Mary Edmiston
- I7 Evelyn Hodel
- I8 LaVerne Hodel
- I9 Barbara VanWellen
- I12 Barbara Ainley
- I13 Elaine Breitbart
- I14 Alan Hiatt
- I15 Richard Marshall
- I16 Terrance Peltzer
- I17 Billy and Peggy Pensar
- I18 George Walton
- I22 Gary and Rebecca Davis
- I23 Jacob Deitz
- I24 Melissa Deitz
- I25 Joseph Ferrara
- I26 Joyce Frazier
- I27 Jose Luis and Rose Ann Gutierrez
- I29 Nancy Hamlin
- I30 Bob Hengst
- I31 David Hengst
- I33 Linda Hengst
- I34 Tammi Hitchcock
- I35 Tom and Jennifer Logan
- I37 George McEwen
- I40 Larry Peltzer
- I43 Randy Redfield
- I44 Del Strange

- I45 Gary and Colene Tarbell
- I46 Lubbert Van Dellen
- I47 Nancy Van Dellen
- I49 James Canterbury
- I50 Kent and Gail Kaulfuss
- I51 Douglas and Kaye Rydberg
- I52 Cheryl Turner
- I53 Stacy Kelch
- I55 B. Davis
- I59 Jack and Kathy Pendley
- I60 Doyle Ritchie
- I61 Cliff Ronk
- I62 Connie Sing
- I63 Patricia Whitendale
- I64 Lenora Graves
- I65 Bowe and Brenda McMahon
- I66 William Pensar
- I67 Joe Sing
- I70 Joel Heaton
- I72 Trudy Wischemann
- I73 Suzanne Bidwell
- I74 Lorene Clark
- I75 James Gordon
- I76 Mary Gordon
- I78 Hayley Hengst
- I79 John O. and Shirley B. Kirkpatrick
- I80 McKenzie Family
- I84 Corky and Laura Wynn
- I85 Scott Belknap
- I86 DeLeondaris Family
- I87 Bill Ferry
- I89 Robert Bennett Lea III
- I90 Gus Marroquin
- I93 Mike and Sharon Potts
- I94 Tami Tarbell-Lea
- I95 Robert Ward
- I96 Diane King
- PM David Bean
- PM Tom Logan
- PM Tricia Stever

Organizations/Agencies

- O3 Meling Brothers
- O5 Stone Corral Irrigation District
- O7 City of Woodlake
- O9 Sentinel Butte Mutual Water Company
- O10 City of Farmersville
- O11 Kaweah Lemon Company
- O12 Wallace Ranch Water Company
- O15 Rocky Hill Incorporated
- O16 PACE
- O19 Paramount Citrus Association
- O20 California Farm Bureau Federation and Tulare County Farm Bureau
- O21 Donald Lawrence Construction Company
- O22 Farmland Conservation Strategies
- O23 Merryman Ranch Company
- O24 Southern California Edison Company
- O25 City of Visalia

4.6.2 Application of the Garamendi Principles

Comment summary

This section of this master response responds to all or part of the following comments:

I23-3	I40-9	I53-4	O20-18
I25-7	I45-1	I79-1	PM 50
I35-6	I51-3	O5-4	

Summary of Issues Raised by Commenters

- The Garamendi Principles encourage upgrading existing lines rather than building new.
- Consider new conductor technology to upgrade existing lines to carry more power.
- The CPUC should incorporate the Garamendi Principles into its final decision on the project.

Response

These comments identified the “Garamendi Principles” as a basis for keeping the Proposed Project within existing rights-of-way by upgrading existing transmission lines rather than building new lines. The Garamendi Principles were written as findings to Senate Bill 2431 (Chapter 1457 of the Statutes of 1988), which was enacted as legislation regarding the role of electric transmission in the future development of California. The pertinent parts of the Garamendi Principles read:

- (b) The Legislature further finds and declares that the construction of new high-voltage transmission lines within new rights-of-way may impose financial hardships and adverse environmental impacts on the state and its residents, so that it is in the best interests of the state, through existing licensing processes, to accomplish all of the following:
1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
 2. When construction of new transmission lines is required, encourage expansion of existing rights-of-way, when technically and economically feasible.
 3. Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons, as determined by the appropriate licensing agency.
 4. Where there is a need to construct additional transmission, seek agreement among all interested utilities on the efficient use of that capacity.

The commenters expressed desire for the proposed San Joaquin Cross Valley Loop Project to conform to Garamendi Principles 1 and/or 2, so as to avoid the creation of any new ROW. These two issues are discussed below.

Upgrading Existing Transmission Lines

Draft EIR Section 3.5.3, *Reconductoring Existing Transmission Lines*, and Section 3.5.4, *Rebuild Existing Transmission Lines*, examine three different scenarios that would avoid the creation of any new ROW. The three scenarios are:

- Reconductor/Rebuild both of the Magunden to Rector 220 kV circuits (158 circuit miles)
- Reconductor/Rebuild both of the Rector to Big Creek 220 kV circuits (136 circuit miles)
- Reconductor/Rebuild both Magunden to Rector 220 kV circuits and Rector to Big Creek 220 kV circuits (294 circuit miles).

The reconductoring analysis also looked at using newer technology conductors (e.g., 1033 ACSR bundled conductor) that have been reported to carry up to 50 percent more energy than the existing 605 ACSR conductor. However, as described in those sections, none of the reconductoring or rebuilding scenarios would meet the basic project objective of substantially improving system strength. Improving the system strength was identified in the Draft EIR as a critical objective of the Proposed Project. Therefore, because this basic project objective would not be met solely by either reconductoring or rebuilding existing transmission lines, this approach was eliminated from further consideration in the EIR.

Expansion of Existing Rights-of-Way

Draft EIR Section 3.2.1, *Consistency with Project Objectives*, summarizes the results of two SCE technical papers (*System Strength and Short Circuit Duty (SCD)/Short Circuit Ratio (SCR) Analysis* and *San Joaquin Cross Valley Loop Project Supplemental Routing Analysis*, which are presented in Appendix D of the Draft EIR) and an additional analysis by the EIR team. This analysis concluded that safe and reliable electric service in the Electrical Needs Area is currently limited by two critical system constraints: power flow capacity and system strength. The analysis further found that while several routing configurations would help alleviate the power flow constraint, only loop configurations (i.e., looping the under-utilized Big Creek-Springville 220 kV lines into the Rector Substation) would also result in a meaningful improvement in system strength. However, there are no existing SCE rights-of-way across the valley that would provide the required system loop. So the primary difference between the routing alternatives studied in the Draft EIR is at what point north of the Rector Substation would the proposed new transmission line turn east from the existing Big Creek-Rector ROW and cross the valley to the Big Creek-Springville transmission line. The portion of the new transmission line from the Rector Substation north to the turning point would be within the existing ROW as called for in Garamendi Principle 2. This distance would vary by alternative, with the proposed Project having the shortest distance in the existing ROW (1.1 mile) and Alternative 3 having the longest distance (14.6 miles) in the existing ROW. However, the length of the new ROW across the valley would not be substantially different between the alternatives (18.5 miles for the Proposed Project, 12.2 miles for Alternative 2, 9.7 miles for Alternative 3, and 12.4 miles for Alternative 6).

Summary

The application of Garamendi Principle 1 (upgrade existing transmission lines) would not provide a technically justifiable solution to achieving the basic objectives of the Proposed Project. Garamendi Principle 2 (use/expand existing rights-of-way) is followed by the Proposed Project and Alternatives 2, 3, and 6 to the extent possible, but a cross-valley component is required to meet the critical basic objectives of the proposed project. As a result, application of Garamendi Principle 3 (creation of new rights-of-way) is justified.

4.6.3 Favors Alternative 3 or 3A

Comment summary

This section of this master response responds to all or part of the following comments:

I1-1	I23-3	I44-1	I63-1	I85-2	O15-1
I3-2	I24-1	I45-1	I63-7	I86-1	O16-1
I4-1	I25-7	I46-6	I63-8	I87-3	O16-4
I5-1	I26-1	I47-6	I63-10	I89-1	O16-5
I6-7	I26-4	I49-1	I64-1	I90-1	O19-1
I6-8	I27-3	I50-2	I65-1	I93-1	O19-14
I7-1	I29-1	I51-3	I66-1	I94-1	O19-20
I8-1	I30-3	I51-4	I66-3	I95-5	O19-23
I9-2	I31-3	I51-5	I67-1	I96-1	O20-10
I12-1	I33-2	I52-1	I70-1	O3-4	O20-18
I13-7	I34-1	I53-1	I73-1	O5-4	O20-20
I14-6	I35-4	I53-4	I74-1	O7-3	O21-1
I15-1	I35-6	I53-6	I75-13	O7-4	O22-4
I16-6	I35-10	I55-1	I76-6	O9-3	PM 32
I17-1	I37-4	I59-1	I78-1	O10-15	PM 37
I18-1	I40-6	I60-1	I79-1	O11-1	PM 48
I22-1	I40-8	I61-1	I80-1	O11-11	PM 50
I23-2	I43-4	I62-1	I84-1	O12-3	

Summary of Issues Raised by Commenters

- Alternative 3 was not fully explored or assessed for feasibility.
- PACE has identified a “work around” (called Alternative 3A) to avoid the sensitive biological resources of the Stone Corral Ecological Reserve that would be crossed by Alternative 3.
- General support for Alternative 3 or 3A vs. the Proposed Project and other alternatives.
- Alternative 3 (or 3A) would have less impact to agricultural resources.
- Alternative 3 (or 3A) would have less impact to humans.

Response

The potential environmental impacts of Alternative 3 were fully explored in the EIR, and it was concluded that Alternative 3 would cause significant unmitigable impacts on northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve as well as to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands (see Draft EIR pages 4.4-53 through 4.4-55). The California Department of Fish and Game agreed with this impact conclusion in their comment letter on the Draft EIR (see Comment O13-1). Accordingly, while Alternative 3 would result in the least impacts on

agricultural resources compared to the Proposed Project and the other alternatives, due to its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. Several variations to SJXVL Alternative 3 in the vicinity of the Stone Corral Ecological Reserve were examined to identify whether potentially significant impacts on wetland and biological resources at the Reserve could be substantially reduced or avoided through route modification. A reconnaissance level field survey of the Alternative 3 alignment and portions of the examined alternatives provided the basis for this analysis, and was supplemented by other resource studies that were performed during the CEQA analysis. Opportunities for such a bypass were substantially constrained due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the Reserve, and the EIR team concluded that any bypass around the Reserve would result in new, additional, or worsened impacts to other environmental resources thereby rendering a “modified” Alternative 3 as unfavorable.

Shortly prior to the public comment meeting on the Draft EIR, PACE identified and released information about a route modification which they claimed was technically feasible and which would purportedly avoid the sensitive biological resources in the Reserve. While the details of this route modification, called “Alternative 3A”, had not been independently vetted prior to the public comment meeting, many commenters expressed strong support for this route over the Proposed Project or any of the other alternatives. The following paragraphs examine the details of Alternative 3A and provide a screening-level analysis of whether the alternative would in fact be feasible and whether it would avoid or substantially lessen any of the significant effects of the project without creating any new, additional, or worsened impacts to other environmental resources.

Description of Alternative 3A

As described by PACE (see Comment O16-4), Alternative 3A would follow the same alignment as Alternative 3 in the existing Big Creek – Rector 220 kV ROW north from the Rector Substation. At approximately 11.6 miles north of the Rector Substation, Alternative 3A would depart from the existing Big Creek – Rector ROW and proceed east approximately 1,200 feet through existing newly planted orchard. The line would then proceed northeast approximately 4,400 feet through previously cultivated fields to a point about 50 feet east of Road 152 and about 1,250 feet South of Avenue 384. Next, the line would proceed north approximately 2,400 feet through a previously cultivated field across Avenue 384 and through an orchard to an abandoned railroad right of way. From that point, the line would proceed northwest approximately 4,100 feet along the abandoned railroad ROW to a point about 50 feet east of the existing Big Creek – Rector 220 kV transmission lines and north of the Reserve. The line would then proceed north adjacent to the existing Big Creek – Rector 220 kV transmission lines approximately 5300 feet to the point of intersection approximately 14.6 miles north of the Rector Substation, where the new line would proceed east across Stokes Mountain as described in Alternative 3.

The “bypass” portion of Alternative 3A would thus be approximately 3.3 miles in total length, with the first 2.4 miles requiring new 100-foot wide ROW and the final 0.9 miles (the portion that rejoins and runs adjacent to the existing Big Creek – Rector ROW) requiring new 50-foot wide ROW. The entire 3.3 miles would be constructed as double circuit 220 kV transmission line.

The EIR team evaluated Alternative 3A in the same manner that was described in the Draft EIR for screening the other project alternatives:

- Does the alternative meet most basic project objectives?
- Is the alternative feasible (legal, regulatory, technical)?
- Does the alternative avoid or substantially lessen any significant effects of the Proposed Project (including consideration of whether the alternative itself could create significant effects potentially greater than those of the Proposed Project)?

Because Alternative 3 (as described in the Draft EIR) meets the basic project objectives, and Alternative 3A is not substantially different electrically than Alternative 3, it is reasonable to conclude that Alternative 3A also meets the basic project objectives. The rest of this analysis, then, focuses on whether Alternative 3A is feasible and whether it would avoid or substantially lessen any of the significant effects of the project without creating any new, additional, or worsened impacts to other environmental resources.

Feasibility of Alternative 3A

CEQA requires that the Lead Agency consider site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, jurisdictional boundaries, and proponent's control over alternative sites in determining the range of alternatives to be evaluated in the EIR (CEQA Guidelines Section 15126.6(f)). Feasibility can include three components:

- **Legal Feasibility:** Does the alternative have the potential to avoid lands that have legal protections that may prohibit or substantially limit the feasibility of permitting a 220 kV transmission line?
- **Regulatory Feasibility:** Does the alternative have the potential to avoid lands that have regulatory restrictions that may substantially limit the feasibility of, or permitting of, a 220 kV transmission line within a reasonable period of time?
- **Technical Feasibility:** Is the alternative feasible from a technological perspective, considering available technology; the construction, operation, and maintenance or spacing requirements of multiple facilities using common rights-of-way (ROW); and the potential for common mode failure?

For the screening analysis, the legal, technical, and regulatory feasibility of Alternative 3A was assessed. The assessment was directed toward reverse reason; that is, a determination was made as to whether there was anything about the alternative that would be infeasible on technical, legal, or regulatory grounds.

Most of the land that would be crossed by Alternative 3A is private property for which rights-of-way could be obtained by SCE either through negotiations with willing landowners or, if necessary, through condemnation proceedings. However, the abandoned railroad ROW in which 4,100 feet of the alternative is proposed is a 100-foot wide ROW that was formerly the San Joaquin Valley Railroad and is currently owned by Rail America (Rail America, 2009a).

Transmission lines require a ROW that is 100 feet wide. In order for Alternative 3A to utilize the 100-foot wide railroad ROW the transmission poles and towers would have to be constructed in the center of the railroad ROW thereby eliminating any potential future use as a rail corridor. Rail America does not want to breach the continuity of the railroad ROW by selling off a piece right in the middle; the purchase price for such a breach would be “exorbitantly high” as it would have to cover the value of the entire railroad ROW not just the short segment of interest for the transmission line. Rather, it would be possible to initiate an annual lease for a portion of the railroad ROW (Rail America, 2009b). However, an annual lease would not meet SCE’s need to have a long-term right to operate and maintain the transmission line. Use of the railroad ROW for Alternative 3A is therefore considered legally infeasible.

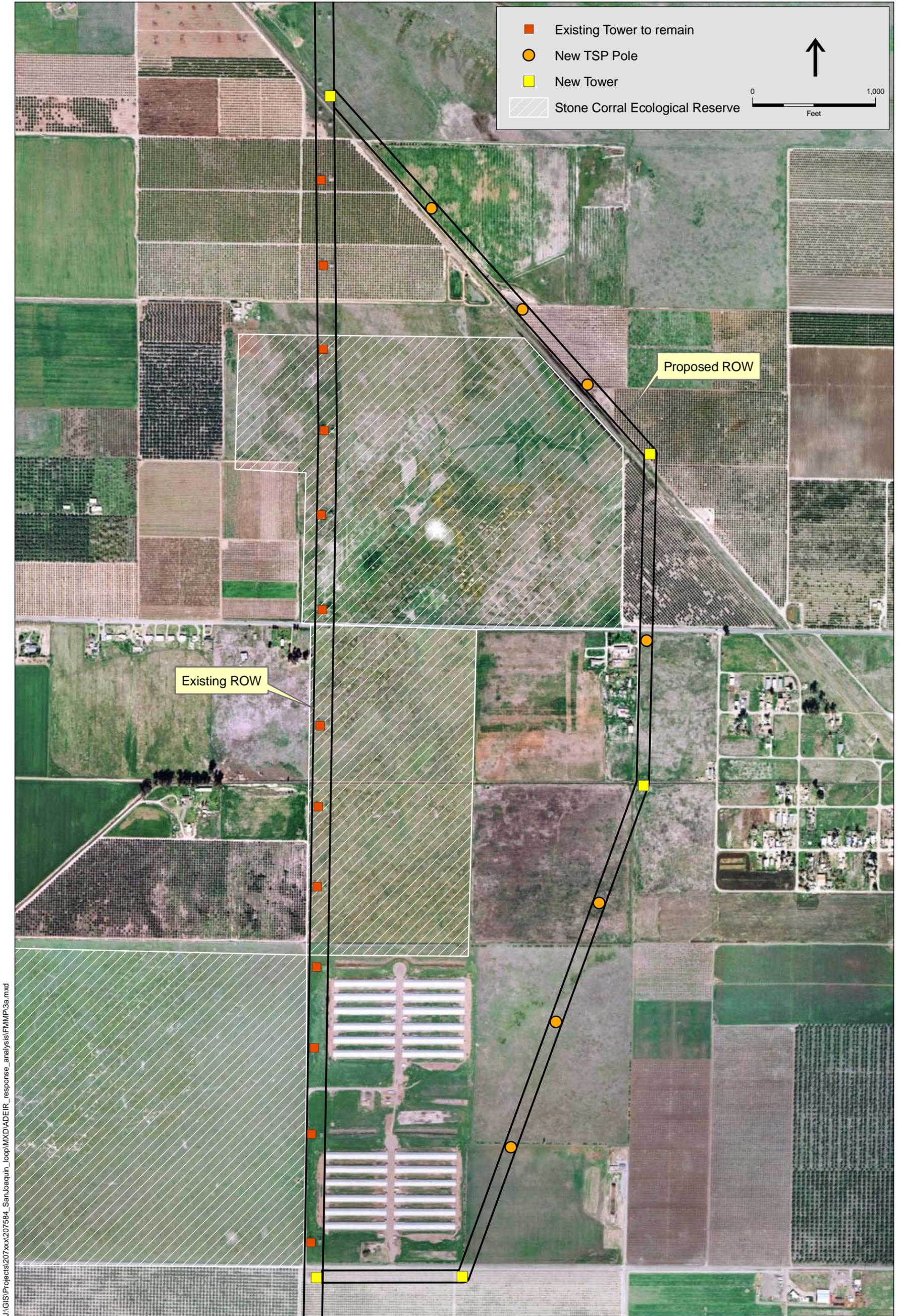
However, rather than completely drop consideration of Alternative 3A at this point on the basis of legal infeasibility, the EIR team looked at whether a further adjustment of the alignment might avoid the railroad ROW thereby rendering the alternative legally feasible. So, rather than follow the railroad ROW, that 4,100-foot portion of Alternative 3A was redrawn just to the north such that it would run adjacent to the railroad ROW. Figure 4.6(RTC)-1 shows Alternative 3A redrawn in this fashion. The position of the transmission poles and towers shown in that figure are approximate locations determined by the EIR team using the same span and distance criteria applied by SCE for the Proposed Project. This configuration of Alternative 3A is used for the environmental screening which follows.

Environmental Screening of Alternative 3A

CEQA requires that to be fully considered in an EIR, an alternative must have the potential to “avoid or substantially lessen any of the significant effects of the project” (CEQA Guidelines Section 15126.6(f)). At the screening stage, it is neither possible, nor legally required, to evaluate all of the impacts of an alternative in comparison to the Proposed Project with absolute certainty, nor is it possible to quantify impacts. However, it is possible to identify elements of an alternative that are likely to be the sources of impact and to relate them, to the extent possible, to general conditions in the subject area.

In this regard, Alternative 3A was assessed to determine whether it would avoid or substantially lessen any of the significant effects of the Proposed Project. As described in the Draft EIR, the Proposed Project would have significant impacts due to the permanent loss of *Prime Farmland*, *Unique Farmland*, and *Farmland of Statewide Importance* (collectively, Farmland), and those impacts would remain significant after mitigation. There are no other significant impacts of the Proposed Project for which an alternative needs to be considered.¹ Based on the many comments received favoring Alternative 3 or 3A as a means of avoiding impacts to Farmland, there appears to be a perception that the Alternative 3/3A alignment would not result in any loss of Farmland merely because that alignment would mostly follow an existing SCE ROW. This is simply not correct. As described in Draft EIR Section 4.2, *Agricultural Resources*, the existing Big Creek – Rector ROW is comprised of Farmland over much of its alignment, and is currently being used

¹ The Draft EIR also identified significant impacts to walnut orchards; however, that impact has been reduced to less than significant through the implementation of a new mitigation measure (see Response O24-6).



J:\GIS\Projects\207xx\207584_SanJoaquin_loop\MXD\ADEIR_response_analysis\FMMP_3a.mxd

THIS PAGE INTENTIONALLY LEFT BLANK

for a variety of agricultural production including walnuts and citrus. Reconstruction of the Big Creek – Rector transmission lines and construction of the new double circuit line for the San Joaquin Cross Valley Loop within that existing ROW would result in permanent loss of Farmland. Portions of the Alternative 3A route modification are also comprised of Farmland which would also experience permanent impacts. Table 4.6(RTC)-1 summarizes the Farmland impacts for the Proposed Project and all the alternatives, including Alternative 3A.

**TABLE 4.6(RTC)-1
PERMANENT DISTURBANCE OF FARMLAND**

	Proposed Project	Alternative 2	Alternative 3	Alternative 3A	Alternative 6
Prime Farmland	16.8	10.0	6.9	7.3	7.1
Unique Farmland	0.7	0.6	1.1	1.1	0.0
Farmland of Statewide Importance	14.4	15.0	10.3	13.5	24.5
Total Permanent Disturbance to Farmland	31.9	25.6	18.2	21.8	31.6

Alternative 3A was also screened to assess whether it may result in any new, additional, or worsened impacts to other environmental resources. The first adverse issue noted with Alternative 3A is that, contrary to sound land use planning practice, it would bisect several parcels rather than following parcel boundaries. The preference for following existing parcel boundaries is reiterated in the California Farm Bureau Federation comments on the Draft EIR (see Comment O20-16).

Another potentially adverse land use issue arises where the Alternative 3A alignment would cross previously subdivided parcels along the western portion of Seville. Seville is identified in the current Tulare County General Plan as a “rural development center” and in the proposed Draft 2008 General Plan as a “hamlet.” In the Draft General Plan, new Policy PF-3.1 would establish Hamlet Development Boundaries, within which urban development for the hamlet would need to occur. Figure 4.6(RTC)-2 is a portion of the Alternative 3A alignment near Seville showing the existing subdivision lines and the Seville Hamlet Development Boundary as depicted in the Draft General Plan. Construction of Alternative 3A would likely result in a loss of use for at least eight parcels within the draft Hamlet Development Boundary.

With regard to aesthetic impacts, Alternative 3A would result in approximately 2.4 miles of new 220 kV double circuit transmission line (including associated towers and poles) in a 100-foot ROW where none currently exists. There are four private residences that would be in close proximity along this 2.4-mile segment of new line. The first residence can be seen near the bottom of Figure 4.6(RTC)-1 just east of where Alternative 3A turns to the northeast. Slightly further north, there is a cluster of three residences and other private structures right at the edge of the Alternative 3A ROW just west of Seville. These residences are shown more clearly in Figure 4.6(RTC)-2. A number of other residences in the southern and western portions of Seville would also have views of the new transmission line from a distance of as little as 600 feet. In

addition, one business (a turkey farm, visible in the lower left of Figure 4.6(RTC)-1) would have the new transmission line immediately adjacent to its southern and eastern boundaries. Together with the existing Big Creek – Rector transmission lines on its western boundary, this business would become surrounded on three sides by transmission lines and structures.

Summary

Alternative 3A (as modified here to be legally feasible by avoiding the railroad ROW) passes screening with regard to meeting the basic project objectives, meeting the tests of feasibility, and lessening significant effects of the Proposed Project (namely, impacts to Farmland). However, as described above, there are a number of adverse issues associated with Alternative 3A that must be considered. At this level of analysis, it is neither possible nor necessary to quantify with absolute certainty the adverse impacts identified for Alternative 3A. However, it is possible to provide a meaningful evaluation, analysis, and comparison to the Proposed Project and the other alternatives.

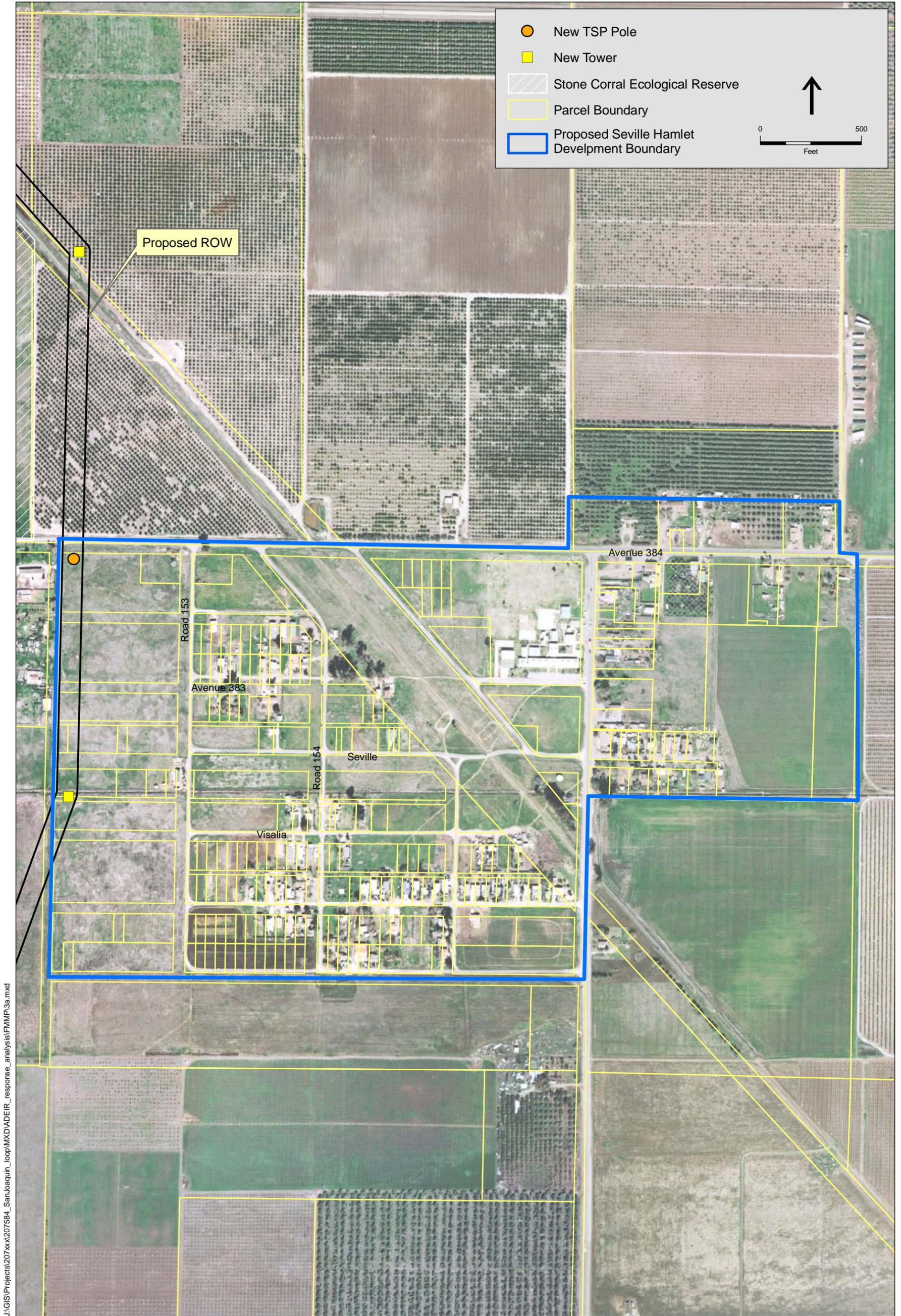
The Draft EIR identified Alternative 2 as the Environmentally Superior Alternative. So the question here is whether Alternative 3A provides a superior benefit over Alternative 2. The only benefit identified in this analysis is that Alternative 3A would impact slightly less Farmland than would Alternative 2 (21.8 acres for Alternative 3A compared to 25.6 acres for Alternative 2, a difference of only 3.8 acres). The adverse impacts of Alternative 3A include some unique issues not associated with Alternative 2. While both alternatives would create new ROW resulting in changes to the aesthetic character of the immediate area, Alternative 3A would place the ROW within 50 feet of several residences and would essentially surround a business on three sides with 220 kV transmission lines. In addition, Alternative 3A would bisect several agricultural parcels rather than following parcel boundaries, contrary to sound land use planning practices and the express preference of the California Farm Bureau Federation. And finally, Alternative 3A would likely result in the loss of use of at least eight parcels within the proposed Seville Hamlet Development Boundary.

Collectively, these unique adverse environmental impacts associated with Alternative 3A are not justified by the slight decrease in Farmland impacts compared to Alternative 2. For this reason, Alternative 2 remains the Environmentally Superior Alternative.

4.6.4 References (not cited in Draft EIR)

Rail America, 2009a. Personal communication with Buck Workman, Western Region Property Manager, Rail America. August 24, 2009.

Rail America, 2009b. Personal communication with Buck Workman, Western Region Property Manager, Rail America. September 17, 2009.



THIS PAGE INTENTIONALLY LEFT BLANK

4.7 Master Response on Non-CEQA Issues

4.7.1 Introduction

Overview

This master response addresses those issues raised by commenters that are outside the bounds of CEQA's concern. Nearly all the Non-CEQA issues are concerns about the Proposed Project's potential economic impacts on local agricultural production and farm owners. The Draft EIR, Section 4.2, *Agricultural Resources*, provides environmental setting information as well as an analysis of impacts to *Prime Farmland*, *Unique Farmland*, and *Farmland of Statewide Importance* (Farmland), as well as an analysis of consistency and compatibility with existing zoning for agricultural use and Williamson Act contracts. Appendix G contains the Final EIR version of Section 4.2, which includes an updated analysis of impacts in response to comments received on the Draft EIR, and all text changes made to the section. All numbers cited in this Master Response are consistent with the numbers in Appendix G.

This Master Response provides additional clarification to those commenter questions specifically raising economic issues associated with the Proposed Project and other non-CEQA issues. The Master Response on Agricultural Resources (Section 4.1) also addresses related comments on impacts to irrigation infrastructure (such as water conveyance systems), wind machines (used for frost protection of citrus crops), and from dust to agriculture, and concerns that those impacts could result in conversion of Farmland to non-agricultural use. The Master Responses on Groundwater (Section 4.4) and Wells (Section 4.5) also address commenter concerns on potential adverse effects on the irrigation water supplies of existing irrigation displaced from the Proposed Project's ROW.

Commenters

Commenters that addressed one or more of these topics include:

Individuals

- I4 Larry Ronk
- I13 Elaine Breitbach
- I14 Alan Hiatt
- I16 Terrance Peltzer
- I21 Chris Corbett
- I27 Jose Luis and Rose Ann Gutierrez
- I28 Terri Hacobian
- I31 David Hengst
- I35 Ton & Jennifer Logan
- I40 Larry Peltzer
- I45 Gary & Colene Tarbell
- I46 Lubbert Van Dellen
- I47 Nancy Van Dellen
- I51 Douglas and Kaye Rydberg
- I53 Stacey Kelch
- I54 Jay and Nancy Culter
- I58 Rhonda Montgomery
- I63 Patricia Whitendale
- I69 Diane Heaton
- I73 Suzanne Bidwell
- I75 James M. Gorden
- I76 Mary Gordon
- I79 John O. and Shirley B. Kirkpatrick
- I82 Lynette Ramirez
- I83 Hudson Rose
- I85 Scott Belknap

- I87 Bill Ferry
- I89 Robert Bennett Lea III
- I90 Gus Marroquin
- I93 Mike & Sharon Potts
- I94 Tami Tarbell-Lea
- I95 Robert Ward
- PM Darwin Hacobian
- PM William Fox
- PM Jack Allwardt
- PM Jose Martinez
- PM Eric Meling
- PM Rudy Garcia
- PM Doug Carman
- PM Tricia Stever
- PM Paul Boyer

Organizations/Agencies

- O3 Meling Bros.
- O4 Meling Bros.
- O5 Stone Corral Irrigation District
- O6 California Citrus Mutual
- O9 Sentinel Butte Mutual Water Co.
- O19 Paramount Citrus Association
- O20 California Farm Bureau Federation and Tulare County Farm Bureau
- O21 Donald Lawrence Construction Company
- O24 Southern California Edison Company
- O25 Schute, Mihaly & Weinberger LLP (representing the City of Visalia)
- O28 Kaweah Pump Inc.

4.7.2 CEQA Relevance of Economic Issues

Comment summary

This section of this master response responds to all or part of the following comments:

I4-1	I45-1	I63-5	I83-1	O9-3	PM 10
I13-2	I46-1	I63-9	I85-2	O19-9	PM 13
I14-3	I46-2	I69-1	I87-2	O19-11	PM 14
I16-5	I46-4	I73-1	I89-1	O19-15	PM 19
I21-1	I47-2	I75-3	I90-1	O20-10	PM 22
I27-2	I47-4	I75-8	I93-1	O20-20	PM 23
I28-1	I51-2	I75-10	I94-1	O21-3	PM 24
I31-1	I53-5	I75-13	I95-1	O24-58	PM 27
I31-3	I53-6	I75-14	O3-2	O25-3	PM 31
I35-1	I54-1	I76-2	O4-1	O25-14	PM 48
I35-4	I54-6	I79-5	O5-2	O25-30	PM 60
I40-5	I58-1	I82-2	O6-2	O28-1	

Summary of Issues Raised by Commenters

- Construction related impacts to orchard crop production would result in revenues losses during the subsequent orchard re-establishment period that would critically reduce affected farmers' profitability and result in job losses.
- Lost farmland acreages will adversely affect local farming production and reduce land owner's income and threaten the economic viability of their existing farm operations.
- Construction impacts and lost farmland acreage will increase irrigation costs to local farms.

- ROW acreage losses to small parcels may no longer be economically viable for farming.
- Lost farmland acreage will result in lost income and employment to both farmers and other businesses in the local community.
- Presence of High-Voltage Transmission lines will reduce property values and reduce local tourism.
- The Proposed Project will adversely affect future development in the area resulting in lost potential local job creation.
- ROW acquisition process will be costly and time consuming.

Response

CEQA Relevance of Economic Impacts

According to the California Environmental Quality Act (CEQA) Guidelines (15358 [b]), impacts to be analyzed in an EIR must be “related to physical changes” in the environment. CEQA Guidelines (15131 [a]) do not directly require an analysis of a project’s social or economic effects because such impacts are not, in and of themselves, considered significant effects on the environment. The guidelines state:

“Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes caused in turn by economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.”

The *CEQA Guidelines* also provide that physical effects on the environment related to changes in land use, population and growth rate induced by a project may be indirect or secondary impacts of the project and should be analyzed in an EIR if the physical effects would be significant (See Guidelines 15358[a][2]).

Consequently, under CEQA, economic impacts to businesses and land owners are generally only relevant if the magnitude and severity of the losses would result in adverse physical changes (such as irreparable damage to land conditions or elimination of agricultural productivity). This is a central issue for most of the economic concerns raised by commenters. Under CEQA, substitution to lower value crops would not represent a significant effect on the environment. Consequently, *changes to the type of crops that can be grown on the farmland would not represent a significant physical change provided the property can continue to be farmed.* Similarly, other economic impacts to local farmers (such as increased water costs which may or may not be directly project related) would not in and of themselves qualify as CEQA impacts.

Differences in Projections of Affected Farmland Impacts

Section 4.2 of the Draft EIR (Appendix G in the Final EIR) analyzes the Proposed Project's impacts to local agricultural resources. The analysis identifies both the Proposed Project's temporary impacts from construction activities and the permanent impact that implementation of the Proposed Project would have on local agricultural production within the proposed ROW. The total affected acreages and crop types are identified in the Final EIR, Appendix G, Tables 4.2-4 and 4.2-5 and their locations are shown in the Draft EIR, Chapter 2, *Project Description*, Figures 2-3a to 2-3j. Impact 4.2-2, and its related Cumulative Impacts, clearly identifies significant, unmitigable impacts to Agriculture. Impact 4.2-2 projects the permanent conversion of 31.9 acres of existing Farmland to non-agricultural uses under the Proposed Project.

Generally, the Proposed Project's ROW routes are located along access routes or at peripheries of farmland parcels. The proposed ROW alignments are located to minimize the fragmentation and disruption to the agricultural properties within each alignment. The only permanent lost agricultural production would be the small acreage of Farmland needed for the proposed new access roads, utility poles and lattice towers (including their 50 and 100-foot maintenance buffers). Each pole would be spaced approximately 1,000 feet apart. Consequently even within the narrow confines of the ROW corridor, 90 percent of the existing Farmland would continue to be available for crop farming. The actual proportion of permanent lost agriculture land for individual farmers would be even smaller since most farmland properties are considerably larger than the project's ROW corridors and local growers typically farm numerous land parcels.

Several commenters express concerns that the Proposed Project would result in major economic impacts to their farm operations, the local farming industry and the wider local community. Most of these commenters' assertions are based on different opinions of the Proposed Project's effects on farming within the area and/or on existing irrigation systems. As a result of their differences in opinion or misunderstanding the Proposed Project's impacts, commenters foresee greater economic impacts. Most of these commenters' differing opinions of the Proposed Project's direct impacts are discussed in detail in the Master Response on Agricultural Issues (Section 4.1) and related Specific Comment Responses or the Master Responses on Groundwater (Section 4.4) and Wells (Section 4.5) and their related Specific Comment Responses. The Master Response on Agricultural Issues specifically addresses the concerns that project-related irrigation system redesign or relocation would have any cost impacts to land owners by clarifying SCE's responsibility under Mitigation Measure 4.2-5.

In any case, the nature and magnitude of the future project-related lost agricultural production does not support any findings of major economic impacts. As stated in Impact 4.2-2, overall a total of 31.9 acres of designated Farmland (of which only 25.9 acres were planted when crop use of the properties was surveyed) would be permanently disturbed. This lost Farmland acreage is distributed evenly along the 18.5 mile route of the Proposed Project and would affect a large number of property owners. Consequently, Farmland acreage losses would represent only a small proportion of most farm owners' holdings. The resulting economic impacts to land owners can not be expected to majorly affect their businesses viability given: (1) the small proportion of the Farmland that would be lost within any individual farm; and (2) that its owners would be

financially compensated for the lost land. Also, the total lost acreage would represent a negligible percentage of Tulare County's and the local area's total Farmland area and sales. Consequently, it can not reasonably be expected that a small acreage of permanently lost Farmland would result in economic effects substantially decreasing farming operations and employment within the local communities which would result in any physical impacts to the local environment.

Role and Effect of ROW Negotiation

Furthermore, the severity of any economic losses to affected land owners would be greatly reduced provided adequate financial assistance to compensate for necessary crop switching or irrigation system changes is provided. As acknowledged in the Draft EIR, Section 4.2, *Agricultural Resources*, page 4.2-12, future ROW acquisition negotiations by SCE would reduce the financial impacts to farmers related to loss of production would be addressed. To provide clarity, the Draft EIR text on page 4.2-12 has been updated as follows:

While not an impact consideration in this CEQA analysis, it is noted here that the financial~~fiscal~~ impacts related to loss of agricultural production (i.e., temporary and permanent) would be addressed by SCE during its ROW acquisition process.

The terms of the financial compensation would aim to equitably recognize project-related *net income* impacts to land owners from lost agricultural production at their affected farmland within the ROW. As stated in the Impact 4.2-1 analysis, both the agricultural impact analysis and CPUC recognizes that temporary impacts can last up to 10 years for orchard type crops such as oranges and walnuts that have significant re-establishment periods. As a result, it is expected that the SCE ROW acquisition negotiation would also recognize the potential for landowners to experience reduced agricultural production and income losses during the subsequent re-establishment period.

To clarify this point, additional text has been added to the Draft EIR, page 4.2-12:

While not an impact consideration in this CEQA analysis, it is noted here that the financial~~fiscal~~ impacts related to loss of agricultural production (i.e., temporary and permanent) would be addressed by SCE during its ROW acquisition process. It is assumed that ROW negotiation would include adequate financial consideration for landowner's reduced net income during the orchard/crop re-establishment period. The net income determination would presumably include consideration of re-establishment costs, partial yields and the existing orchards' productivity.

Some commenters expressed concern and skepticism that the ROW negotiation process will be effectively implemented in an equitable and timely manner. There are adequate legal and institutional precedents and procedures to expect that the ROW negotiation process would be successfully completed.

Successful completion of the future ROW negotiation and implementation of the identified mitigation measures (as necessary) would ensure that the current farming operations would remain economically viable and agriculturally productive.

In summary, as discussed above, the commenters' assertions that their current farming production would decrease despite the implementation of the agricultural mitigation measures and results of the ROW negotiations remain highly debatable. However, in any case, their properties' continued capacity for any productive and economically viable agricultural use would ensure that no other physical change in the environment than those identified in the Draft EIR are attributable to the Proposed Project.

Non-Agricultural Related Economic Issues

The project area is predominantly an agricultural region. Consequently tourism is not a major component of the local economy and has negligible influence on local land use decisions. As a result, no project related impacts on local tourism may be expected that would result in physical changes to the area. One commentator also expressed the opinion that the Proposed Project's preferred alternative would preclude potential future development of an industrial park in Farmersville. Besides the speculative nature of such a proposed future development, acquisition of the properties' ROW should facilitate any necessary redesign or relocation of the project. Simply stated, there is insufficient information to attribute an impact to the property that would represent an adverse environmental impact to the currently undeveloped property.

A couple of commenters expressed concern about potential adverse effects on property values from the Proposed Project. Potential visual impacts as well as health and safety effects are the primary concerns commonly associated with living near power lines. The Project's potential visual impacts are analyzed in the Draft EIR, Section 4.1, *Aesthetics*. And although the presence of Electric and Magnetic Fields (EMF) are generally not recognized as a CEQA issue, the potential relevance and effects of EMFs are discussed in the Draft EIR, Section 4.7, *Hazards and Hazardous Materials*.

While there is some evidence that transmission lines may under some circumstances affect property values, the effects are generally found to be smaller than anticipated. Projecting the magnitude of any decrease in home values requires extensive real estate market analysis and is beyond the scope of environmental review under CEQA. Furthermore, in a predominantly agricultural area such as that within the study area, property prices would be mostly determined by the land's agricultural productivity. Consequently, since the Proposed Project would have a very small impact on the area's local agricultural productivity, the Proposed Project may correspondingly be reasonably expected to have a similarly very small impact on local property prices. Furthermore, the ROW acquisition process can be expected to largely address the local land value changes to local land owner's from any lost productive farmland.

CHAPTER 5

Responses to Organizations

Letter O1, San Joaquin Valley APCD

Response O1-1 The commenter states that mitigation measures to reduce construction exhaust must be fully enforceable through permit conditions, agreements, or other legally binding instruments. The commenter recommends incorporating, as a condition of project approval, a requirement that off-road construction equipment used on site achieve fleet average emissions equal to or less than Tier II emissions standards of 4.8 NO_x grams per horsepower-hour achieved through any combination of uncontrolled engines and engines complying with Tier II and above engine standards.

In response to this comment Mitigation Measure 4.3-1a is revised as follows:

Mitigation Measure 4.3-1a: SCE shall submit an Air Impact Assessment application to the SJVAPCD that demonstrates how exhaust emissions from construction equipment greater than 50 horsepower shall be reduced by at least 20 percent from the statewide average NO_x emissions rate and 45 percent from the statewide average PM10 exhaust emission rate. The Air Impact Assessment shall also demonstrate that construction NO_x emissions associated with the project would be reduced to less than 10 tons per year. These reductions shall be achieved through any combination of on-site reduction measures (e.g., utilizing add-on controls, cleaner fuels or newer lower emitting equipment) and off-site reduction fees paid directly to the SJVAPCD. Furthermore, SCE shall and/or its contractors shall achieve fleet average emissions equal to or less than the Tier II emissions standards of 4.8 NO_x grams per horsepower hour. This can be achieved through any combination of uncontrolled engines and engines complying with Tier II and above engine standards. SCE shall provide a copy of the approved application to the CPUC prior to commencement of construction activities.

Response O1-2 The commenter notes that since exhaust and fugitive PM10 emission are mitigated differently, Table 4.3-4 should be revised to include separate columns for fugitive and exhaust PM10 emissions.

Table 4.3-4 does include a breakdown of exhaust and fugitive PM10 and PM2.5 emissions. These emissions are included as two separate rows under

each activity, the first displaying exhaust emissions and the second displaying fugitive dust emissions.

Response O1-3 The commenter notes that the District applies a threshold of 15 tons per year to determine significance of PM10 emissions from fugitive dust from large projects. The commenter recommends that the emissions and mitigation measures be quantified to determine if fugitive dust emission will be less than significant after mitigation measures have been applied.

In response to this comment, text found on pages 4.3-18 through 4.3-19 of the Draft EIR are revised as follows:

As discussed previously, the SJVAPCD has not developed quantitative thresholds for evaluating impacts of PM10 or PM2.5 emissions, but instead emphasizes the implementation of effective dust control measures to mitigate PM10 impacts. The SJVAPCD recommends that construction projects that generate 15 tons of fugitive PM10 emissions per year be considered significant. As shown in Table 4.3-4, construction of the Project would result in 51.1 tons of PM10 emissions, 50.6 tons of which would result from fugitive dust emissions. Approximately 14.7 tons of fugitive PM10 emissions would be emitted from grading and earth moving activities associated with transmission line construction while 35.6 tons would result from travel on unpaved roads and 0.3 tons would result from travel on paved roads.

Applying water every three hours to disturbed areas within a construction site has been shown to reduce PM10 emissions by approximately 61 percent. Limiting on-site vehicle speeds on unpaved roads to 15 miles per hour would reduce fugitive dust emissions by approximately 57 percent (SCAQMD, 2007a). Furthermore, watering unpaved roads twice daily would reduce PM10 emissions by an additional 55 percent (SCAQMD, 2007b). Therefore, implementation of Mitigation Measure 4.3-1b would reduce fugitive dust emission from grading and earth moving activities to approximately 7.2 tons per year and emissions from travel on unpaved roads to approximately 6.8 tons per year. As a result, total fugitive dust emission associated with construction of the Proposed Project would be approximately 14.3 tons per year with implementation of Mitigation Measure 4.3-1b. Since these emissions would not exceed the SJVAPCD's recommended threshold of 15 tons per year of PM10, impacts would be less than significant.

Because most of the PM2.5 emissions that would be associated with the Proposed Project would be from fugitive dust, effective dust control measures would also mitigate PM2.5 impacts. Implementation

of Mitigation Measure 4.3-1b would require SCE to implement dust control measures recommended by SJVAPCD, and would reduce impacts from PM10 and PM2.5 emissions associated with construction to less than significant.

The following references are added to the Draft EIR (Section 4.3, page 4.3-33):

SCAQMD, 2007a. Table XI-A: Mitigation Measure Examples: Fugitive Dust from Construction and Demolition, last revised April 2007.

SCAQMD, 2007b. Table XI-D: Mitigation Measure Examples: Fugitive Dust from Unpaved Roads, last revised April 2007.

Letter O2, Meling Bros

- Response O2-1 The commenter is concerned that the project would require the relocation of four wind machines located within his property which would make farming sections of his land difficult and perhaps infeasible. For impacts to wind machines see Master Response 4.1.
- Response O2-2 The comment expresses the view that acreage under the new transmission line would be lost to farming due to equipment use constraints within the new right-of-way (ROW). It is acknowledged that all farming equipment within the ROW would have to adhere to the working clearance heights identified in Cal OSHA Title 8 of the California Code Section 2946. It is possible that some equipment may be too tall to operate under the lines when taking into account the maximum line sag. However, farming practices have been occurring for many years under the existing Rector-Big Creek 3 transmission lines. So it is incorrect to conclude that all farming practices will be incompatible with the proposed new transmission line.

Letter O3, Meling Bros

- Response O3-1 The commenter is concerned about the calculation methodology for maintenance buffers surrounding poles and towers. See Response I54-2.
- Response O3-2 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response O3-3 The commenter is concerned about the potential impacts to existing wells and the feasibility of having to relocate them per Mitigation Measure 4.7-11b. The commenter is referred to Master Response 4.5.
- Response O3-4 The commenter expresses general support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because of less impacts to

agriculture. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Response O3-5 The commenter is concerned about loss of Farmland due to the removal of wind machines. See Master Response 4.1.

Letter O4, Meling Bros

Response O4-1 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response O4-2 The commenter is referred to Response O2-2.

Letter O5, Stone Corral Irrigation District

Response O5-1 The commenter is concerned about impacts to Stone Corral Irrigation District's irrigation infrastructure. The commenter is referred to Master Response 4.1.

Response O5-2 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response O5-3 The commenter is concerned about potential impacts to the water table and well productivity. The commenter is referred to Master Responses 4.4 (Groundwater) and 4.5 (Wells).

Response O5-4 The commenter expresses support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because it would utilize more existing ROW and would therefore adhere to the Garamendi Principles, and would have less impacts to agricultural resources and wells. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.5 for information regarding wells. The commenter also asserts that land use impacts for the City of Farmersville were not adequately analyzed in the Draft EIR; however, the commenter provides no specifics as to the nature of the inadequacy.

Letter O6, California Citrus Mutual

Response O6-1 The commenter correctly states that Government Code Section 51290 of the Williamson Act declares that it is the policy of the state of California to avoid, whenever practicable, locating public improvements and any public utilities improvements in agricultural preserves. The commenter is correct in recognizing that state policy seeks to minimize public improvements within agricultural preserves. However, Code Section 51292 also specifically permits public improvements within agricultural preserves when "there is no other land within or outside the preserve on which it is reasonably feasible to

locate the public improvement” and provided that the location has not been selected “primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.” As can be seen from Figures 4.2-1 and 4.2-2, the predominance of Important Farmland and Williamson Contracted properties throughout the region ensure that any alignment would necessarily result in traversing agricultural preserves.

Furthermore, as stated in the Draft EIR, Section 4.2, *Agricultural Resources*, Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use. Code Section 51238.2 also states that “(n)o land occupied by gas, electric, water, communication, or agricultural laborer housing facilities shall be excluded from an agricultural preserve by reason of that use.” Accordingly, the Draft EIS concludes that use of portions of Williamson Act contract lands for the transmission line ROW (including the disturbed Farmland areas) would not result in termination or modification of the properties’ existing Williamson Contract for such compatible uses. The placement of transmission poles/towers on land currently under Williamson Act contract is considered a compatible use, and therefore would not remove the land from Williamson Act contract status.

- Response O6-2 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response O6-3 The commenter requests that the California Public Utilities Commission (CPUC) reject the San Joaquin Cross Valley Loop Transmission Project, and if the CPUC determines that the project is essential, that the CPUC choose the alternative that minimizes the taking of additional prime agricultural land and maximizes the use of existing ROW. Comment noted.

Letter O7, City of Woodlake

- Response O7-1 The commenter notes that they would like the biological resources conservation easements that are identified in Mitigation Measures 4.4-2b, 4.4-8 and 4.4-9b to be obtained within Tulare County. While this may be possible, with mitigation opportunities available at the Sand Creek Conservation Bank operated by Wildlands, Inc. in Tulare County; each bank operates within a designated service area that typically covers a broad, multi-county area. The U.S. Fish and Wildlife Service (USFWS) allows the Sand Creek Conservation Bank to serve a 10-county area including San Joaquin, Calaveras, Stanislaus, Tuolumne, Merced, Mariposa, Madera, Fresno, Kings and Tulare Counties. The selection of conservation lands, if required for the project, will defer to the mitigation requirements specified by the USFWS, which provides local mitigation as identified by service area. Factors influencing the selection of an appropriate bank, among other factors, will depend on the type of resources that are being mitigated, availability of

mitigation credits at local mitigation banks, and proximity of banks to the impact sites (for which a bank in an adjacent county may be more proximity to the impact site than one in Tulare County).

- Response O7-2 The Draft EIR text (page 4.4-18) is consistent with Figure 4.4.-4, in that it correctly identifies that the Alternative 2 alignment traverses approximately 4 miles of critical habitat for both Hoover’s spurge and San Joaquin Valley Orcutt grass.
- Response O7-3 The commenter expresses support for Alternative 3A. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.
- Response O7-4 The commenter expresses general support for Alternative 3 because it would have impacts to the fewest people. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter O8, Kenneth D. Schmidt and Associates (Groundwater Quality Consultant for PACE)

- Response O8-1 The commenter states that the discussion and description of regional groundwater is not sufficiently detailed, and the commenter is also concerned about the feasibility of relocating wells (if necessary). The commenter is referred to Section 4.8, *Hydrology and Water Quality*, pages 4.8-4 through 4.8-5, for a discussion/description of regional groundwater characteristics. The commenter is referred to Master Response 4.5 concerning potential well relocation.
- Response O8-2 The commenter states that Alternative 3 would be the least problematic in terms of the potential need to relocate existing wells. The well surveys would be conducted as part of a mitigation measure. As such, it cannot be determined at this point exactly how many wells would actually need to be relocated. Regardless, there are many other factors that ultimately determine the feasibility of one alternative over another; these factors, including the potential relocation of wells, are collectively considered in determining the feasibility of a given alternative.

Letter O9, Sentinel Butte Mutual Water Company

- Response O9-1 The commenter is concerned about the potential impacts to wells and the feasibility of having to relocate them per Mitigation Measure 4.7-11b, particularly with regard to the old wagon wheel-style wells. The commenter is referred to Master Response 4.5.

- Response O9-2 The commenter is concerned about potential impacts to irrigation lines and the feasibility of relocating irrigation infrastructure. The commenter is referred to Master Response 4.1.
- Response O9-3 The commenter is expresses support for Alternative 3 for economic and biological reasons. The commenter is referred to Master Response 4.7 regarding economic considerations, and Master Response 4.6 regarding alternatives.

Letter O10, City of Farmersville

- Response O10-1 The commenter expresses the opinion that the Draft EIR (Section 4.1-1, *Aesthetics*) provides insufficient analysis of the visual impact to Farmersville residents' views and especially those within the City's more populated areas such as Liberty Park or Farmersville High School. The commenter requests that Section 4.1-1 be amended to include an additional analysis of the visual impacts to these residents. As described in Response I68-4, sensitive viewer groups were determined by assessing potentially sensitive land uses (including major transportation systems and designated park, recreation, and natural areas), in conjunction with locations that have a moderate to high number of viewers. Within the City of Farmersville, Farmersville Boulevard was assessed as a visually sensitive location, as it represents the major thoroughfare in the City. Impacts to Farmersville Boulevard are discussed on pages 4.1-44 to 4.1-45. Impacts were determined to be less than significant after implementation of Mitigation Measure 4.1-5, which requires treatment of surfaces of structures visible from the road with appropriate colors, finishes and textures, and requires the use of non-specular and non-reflexive materials.

Section 4.1 does not discuss the visibility of the Proposed Project from Farmersville High School since the transmission line would generally be fully screened by intervening structures and vegetation. Recreational users of Liberty Park would have relatively limited views of the Proposed Project which would be located approximately 0.4 miles north of the park. Views from the park would range from partially to fully obscured by intervening trees and structures. Construction of the Proposed Project would result in a moderate visual contrast, and the transmission facilities would be co-dominant with other existing industrial structures visible from the park, including propane tanks and Cemex facilities. The overall visual change would be low to moderate. The visual sensitivity of the park is a function of its visual quality, viewer types and volumes, and viewer exposure. Liberty Park's visual quality is typical of a local community park, with lawn, planted trees, and park facilities including picnic tables and a paved jogging track. Viewers would consist of park visitors and although average daily visitation

data was unavailable, park representatives reported that there are consistently between 5 and 20 visitors at the park at any given moment throughout the day, with much higher numbers on the weekends and during the summer (Martinez, 2009). Liberty Park is one of the City's most used parks and given the small size of the Farmersville community, by local standards the number of visitors would consequently be considered moderate-high. View duration would be low-moderate, as visitors to the park would see the poles from a distance of approximately 0.4 miles, and views would be partially screened by trees. As such, overall visual sensitivity of Liberty Park would be moderate-high. Because the Proposed Project would result in a low to moderate visual change, in conjunction with its moderate-high visual sensitivity, visual impacts would be adverse but not significant.

- Response O10-2 The commenter expresses the opinion that the Draft EIR's description of the City of Farmersville's existing visual setting is incorrectly applied in the visual impact analysis. The commenter is correct that the existing wood utility poles along roadways would not obscure the views of the Proposed Project. However, the analysis in Section 4.1, *Aesthetics*, considers the project area's existing visual character and how the Proposed Project would be consistent with or contrast with the existing visual setting. The introduction of additional infrastructure on Farmersville Boulevard is considered in the context of a road that has already been highly modified with utility infrastructure. Nevertheless, despite this existing infrastructure, impacts to Farmersville Boulevard were determined to be significant, requiring Mitigation Measure 4.1-5 (Section 4.1, *Aesthetics*, page 4.1-45). Impacts are less than significant with mitigation.
- Response O10-3 The commenter is concerned about visual impacts to Liberty Park in the City of Farmersville. See Response O10-1.
- Response O10-4 The commenter points to Figures 4.1-5b and 4.1-6b as evidence that the Proposed Project will impair views of the Sierra Nevada and become the visual backdrop for a portion of the Farmersville community. Because Farmersville Boulevard is oriented north-south, views of the Sierra Nevada are not depicted in the simulations since the simulations show the perspective of a motorist traveling south and north, respectively. Impacts to views of the Sierra Nevada are discussed in the Draft EIR (Section 4.1, *Aesthetics*) primarily from the perspective of motorists on SR 198 traveling east towards the mountains, and are analyzed under Impact 4.1-1 (page 4.1-39). Implementation of Mitigation Measure 4.1-1a would reduce potential impacts to this viewshed to less than significant. Views of the Sierra Nevada are also discussed under Impact 4.1-5 (page 4.1-47) for residents and local roadways. Impacts were determined to be less than significant.

The commenter also expressed the opinion that, in Figures 4.1-5a and 4.1-5b, the horizontal view in the simulations is too limited, and does not represent that residents would look northeast to enjoy views of the Sierra Nevada. In addition, the commenter feels the simulation misrepresents the impact by showing only one tower. As discussed in Response I37-1, the simulations illustrate the location, scale and appearance of the Proposed Project as seen from representative public viewpoints. The simulations depict views of the transmission line as it traverses Farmersville Boulevard. Only a single tower is shown in Figure 4.1-5b because that is the only tower that would be located within the perspective represented in the photograph. Visual resource experts at ESA reviewed the simulations as part of the Draft EIR analysis, and determined that the visual simulations are presented in a manner that clearly and reasonably depicts the location, scale and general appearance of the project as seen within its landscape context.

- Response O10-5 The commenter requests evidence that Mitigation Measure 4.1-5 (Section 4.1, *Aesthetics*, page 4.1-45) will be sufficient to reduce aesthetic impacts to less than significant, and would like photo simulations showing examples of poles with and without treatment. CEQA requires that mitigation measures be feasible procedures which could minimize significant adverse impacts, and that there is an essential nexus (i.e. connection) between the mitigation measures and a legitimate governmental interest (Section 15126.4). CEQA does not require proof that the mitigation measure will ensure its intended outcome. As discussed in the Draft EIR, Mitigation Measure 4.1-5 is feasible and would minimize aesthetic impacts to affected viewshed. For additional information, see Response O25-20.
- Response O10-6 The commenter would like to know what kind of a project would result in a significant visual impact on Farmersville Boulevard. The commenter is correct in stating that the Proposed Project would have an incremental visual effect (Draft EIR, Section 4.1, *Aesthetics*, page 4.1-45). However, the analysis also determines that impacts to Farmersville Boulevard would be significant. As such, Mitigation Measure 4.1-5 requires the implementation of surface treatment measures to reduce the visibility of the Proposed Project to motorists on Farmersville Boulevard to a less than significant visual impact.
- Response O10-7 The commenter states that the Draft EIR fails to fully evaluate the potential conversion of Farmland in and around the City of Farmersville (Section 4.2, *Agricultural Resources, Impact C*, page 4.2-15), because the transmission line would bisect land designated for Industrial and General Commercial land use, rendering it unsuitable for development, and thereby forcing the City of Farmersville to expand elsewhere into *Prime Farmland*. The commenter is referred to the Draft EIR, Section 4.9, *Land Use, Planning and Policies*, which discusses the compatibility of transmission lines with City of

Farmersville General Plan and Specific Plan land use designations, as well as zoning designations. Transmission lines are not incompatible with Industrial and General Commercial land use, and the presence of transmission lines does not preclude industrial and general development. Therefore, there is not a clear causal relationship between the construction of the Proposed Project and a resulting indirect conversion of Farmland to non-agricultural use. It is also likely that alternate configurations of any future development would be able to occur at the site and that the current land would receive ROW compensation appropriate for the properties value. Furthermore, prior to construction, the project Applicant would, in accordance with General Order 131-D, obtain input from the City of Farmersville regarding local land-use issues related to the siting of the Proposed Project.

Response O10-8 The commenter expresses the opinion that the Proposed Project is contrary to the City of Farmersville’s General Plan policies regarding land use and planning. The CEQA checklist specifically requires analysis to evaluate whether a project “would ...conflict with any applicable land use plan, policy, or regulation of *an agency with jurisdiction over the project* [emphasis added]...adopted for the purpose of avoiding or mitigating an environmental effect.” The City of Farmersville does not have jurisdiction over the project. As stated in the Draft EIR, Section 4.9, *Land Use, Planning, and Policies* (page 4.9-3, second paragraph from the bottom): the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Although these projects are exempt from local land use and zoning regulations and discretionary permitting (i.e., would require approval from a local decision-making body such as a planning commission or city council), General Order No. 131-D, Section XIV.B requires that in locating a project “the public utility shall consult with local agencies regarding land use matter.” Consequently, while the project is not subject to local land use plans and policies, the public utility is required to obtain any required non-discretionary local permits.

Furthermore, the Draft EIR concluded that the Proposed Project and alternatives would not be inconsistent with local land use and zoning designations in the City of Farmersville or any other local jurisdiction. As discussed in Response I11-1, the Proposed Project and alternatives would also not be inconsistent with the amendments to the City of Farmersville General Plan, Highway 198 Corridor Specific Plan, and zoning ordinance, adopted in May of 2009.

Response O10-9 The commenter expresses the opinion that more justification should be provided in the Draft EIR as to why potential land use conflicts associated with the implementation of the Proposed Project and the Highway 198

Specific Corridor Plan are not further discussed. As explained in Response O10-8, the CPUC has preemptive jurisdiction over the construction, maintenance, and operation of SCE facilities in California. Consequently, the City of Farmersville has no discretionary jurisdiction over the Proposed Project and therefore no additional discussion of the local land use regulatory framework is necessary. The CPUC's General Order 131-D does require SCE to comply with local building, design, and safety standards to the greatest degree feasible to minimize Project conflicts with local conditions. However, as noted in Response I11-1, amendments to the City of Farmersville General Plan and Highway 198 Corridor Specific Plan land use designations and zoning designations were adopted in May 2009. The language and analysis in Section 4.9, *Land Use, Planning and Policies*, has been adjusted accordingly. Despite these amendments, there remain no inconsistencies between the General Plan and Highway 198 Corridor Specific Plan land use designations, or zoning designations.

Response O10-10 Based on the City of Farmersville's Highway 198 Corridor Specific Plan (2003), the commenter is concerned with the potential loss of recreational opportunities if the Proposed Project's transmission line right-of-way bisects the area located north of Avenue 291 between Farmersville Boulevard and Road 169, as portrayed in Draft EIR Figure 4.9-4.

Figure 4-13 of the Highway 198 Corridor Specific Plan identifies the Proposed Project's transmission line alignment area as one among several possible locations for a storm water ponding basin. As the commenter notes, the Specific Plan states (page 4-22), "All ponding basins shall be multi-use whenever possible." However, this language must be read in context with the rest of the sentence, which continues "[and] shall be graded, landscaped and fenced to City standards." The term "multi-use" does not automatically include recreational uses and the fact that such ponds "shall. . . be fenced" indicates that exclusion of the public from the immediate area is foreseeable – perhaps necessary – under some circumstances.

Additionally, the Specific Plan states (page 4-22) that City's storm drainage system is designed to be implemented incrementally as development occurs. As stated in Draft EIR Section 4.9, *Land Use, Planning and Policies*, page 4.9-13, top paragraph, at the time of publication of the Draft EIR, no applications to develop any specific parcel(s) and/or change the existing land use designations in the area that could be served by a ponding basin within the Proposed Project right-of-way had been received by the City (Miller, 2009). The record contains no evidence of a schedule, no evidence of funding, and no evidence of an application that would provide any certainty as to the exact size, capacity, location or other details of a ponding basin such as would be necessary to analyze potential environmental impacts in a

meaningful way. In fact, there is no indication whatsoever in the record that the development anticipated by the Specific Plan in this area will ever occur. Accordingly, for purposes of this Draft EIR, a ponding basin in this area is considered speculative. CEQA does not require analysis of potential impacts under these circumstances.

Response O10-11 The commenter states that the City of Farmersville does have plans for a system of bike paths in the City. In response to this comment, the following text from the Draft EIR (pg. 4.13-3, top of page) has been revised as follows:

The City of Farmersville does not have a system of bike paths, and as of 2008 had no plans for such a system; however, the City of Farmersville General Plan Circulation Element, page 3-27, states that the City of Farmersville has been participating with the Tulare County Association of Governments in developing a County-wide bicycle route plan. The General Plan notes that the plan is in draft stage and identifies four future bicycle routes, including Farmersville Boulevard and Road 168 in the project area (Martinez, 2008; City of Farmersville, 2002).

In any case, the Proposed Project does not contain a residential component that would result in an increased use of recreational facilities, nor include or require the construction or expansion of recreational facilities. Moreover, as currently envisioned, the potential bike routes would only cross under the lines of the Proposed Project in its north south progression on Farmersville Boulevard and Road 168 if the plan is adopted as currently envisioned. In any case, there are no significant unmitigable impacts related to recreational use or aesthetics in the vicinity of Farmersville Boulevard and Road 168.

Response O10-12 The commenter states that the Draft EIR should include an acknowledgement of the City of Farmersville Highway 198 Corridor Specific Plan in Section 4.15, *Utilities and Service Systems*, and an analysis of the potential impacts of the Proposed Project on the planned public service systems. Section 4.15, as written, addresses impacts that would occur within the City of Farmersville, which includes the area within the City that is part of the Highway 198 Corridor Specific Plan. The Draft EIR concluded that the Proposed Project and the alternatives would not result in significant impacts to utilities and service systems in the City of Farmersville or any other local jurisdiction.

Response O10-13 The commenter requests a visual diagram depicting the Proposed Project alignment within the City of Farmersville's General Plan Land Use and Zoning diagrams. The Draft EIR, page 4.9-11, Figure 4.9-4, is a map showing the City of Farmersville General Plan Land Uses at the time of the NOP's publication in August 2008. Subsequent to amendments made to the City of Farmersville General Plan and Highway 198 Corridor Specific plan land use designations,

and zoning designations, were adopted as of May 2009. Figure 4.9-4 has been updated to include the most recent land use designations (see Response I11-1). A diagram, or map, depicting the Proposed Project's alignment in relation to zoning designations would show the Proposed Project as traversing parcels zoned *Industrial*, *General Commercial*, and *Highway Commercial*. See Response I11-1 for text changes made to Section 4.9, *Land Use, Planning, and Policies*, in response to these subsequent amendments.

- Response O10-14 The commenter would like the Project Description to be clarified, to indicate that a portion of the Proposed Project route is located within the City of Farmersville. In response to the comment, the text in the Draft EIR (page 2-1, Section 2.2, Project Location, first paragraph) has been revised as follows:

The Proposed Project transmission line traverses east from the City of Visalia through the northern portion of the City ~~north of the cities of~~ Farmersville and north of the City of Exeter (Figure 2-1).

- Response O10-15 The commenter expresses general support for Alternative 3. This summary comment does not identify any new issues that were not addressed in preceding comment responses. Please see Master Response 4.6 for information regarding Alternative 3.

Letter O11, Kaweah Lemon Company

- Response O11-1 The commenter cites Chapter 5 of the Draft EIR which states that a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological reserve could not be found (page 5-7). The commenter provides a study identifying and analyzing the Alternative 3A alignment. Please see Master Response 4.6 for information regarding Alternative 3A.
- Response O11-2 The commenter states the opinion that the Draft EIR underestimates the lost Farmland acreage due to the infeasibility of implementation of Mitigation Measure 4.2-5, and expresses concern about potential impacts to irrigation lines and the feasibility of relocating irrigation infrastructure. The commenter also states that the EIR does not indicate whether land used for work areas and pull and tension sites would be returned to agricultural use upon completion of the project.

Regarding the concerns of the feasibility of implementing Mitigation Measure 4.2-5 and potential impacts to irrigation infrastructure, see Master Response 4.1 (Agricultural Issues), which clarifies SCE's responsibilities under the Mitigation Measure including its requirement to maintain current irrigation levels during and after construction on local land owners' farm properties.

The commenter is referred to Chapter 2, *Project Description*, Section 2.6 Right-of-Way Requirements (page 2-22), which discusses the SCE's ROW land acquisition. SCE has a 150-foot wide ROW associated with the existing transmission line north of the Rector Substation. The new ROW for the Proposed Project and alternatives would be approximately 100-feet wide. After construction is completed, land used for work areas and pull/tension sites located within the existing or new ROW areas could be continue in agricultural production subject to the ROW restrictions (i.e. crop height restrictions and farming would be excluded from the maintenance buffer areas for the utility poles). However, land outside of the existing and future ROW that is used for work areas and pull/tension sites would not become permanent ROW, nor would it be placed in an easement. Consequently, construction impacts to all lands outside the ROW would be temporary.

Response O11-3 The commenter is concerned that the methodology used to calculate potentially reclaimed Farmland underestimates to total number of permanently disturbed acres and consequently the acreage of mitigation lands to be placed in conservation easements are similarly underestimated. The Draft EIR, Section 4.2-13, *Agricultural Resources*, determined the acreage of currently disturbed Farmland that would have the potential to be returned to agricultural use ('reclaimed Farmland') by calculating the area within the approximate 24-foot by 24-foot base of each of the 12 towers to be removed. As page 4.2-13, states: "Land covered by these existing towers that is not located with the maintenance area of new towers could be returned to productive agricultural use. The calculations for total permanent impacts take into account this potentially reclaimed land." The specific reclamation sites were examined to determine what crops are currently growing around the existing towers. Using the assumption that farmers would replant the reclaimed land with the same crops growing around that land, the EIR analysts determined that, for the Proposed Project, approximately 0.01 acres of cherry, 0.03 acres of plum, and 0.1 acres of tangerine could be reclaimed (see Appendix G, which contains the Final EIR version of Section 4.2, *Agricultural Resources*, including all updated analyses, figures and text changes). Beyond this analysis of adjacent crops, the specific sites were not individually studied to determine whether the sites would, in fact be replanted. For this reason, the Draft EIR refers to this land as "potentially reclaimed land" (page 4.2-13, top paragraph). However, regardless of whether or not farmers choose to replant in these locations, currently disturbed Farmland would be returned to undisturbed Farmland status. For this reason, the potentially reclaimed farmland was subtracted from the acreage disturbed by the Proposed Project, to yield total permanent impacts. For the Proposed Project, the reclaimed land represents 0.3 percent of the total permanently disturbed area.

- Response O11-4 The commenter is concerned that two Tulare County Assessor Parcel Numbers were omitted in the analysis for Williamson Act Contracted Land. Parcel numbers 113-250-019 and 113-250-026 were included in the 66 parcels under Williamson Act Contract that would be traversed by the Proposed Project, and together constitute 58 acres (Draft EIR, Section 4.2, *Agricultural Resources*, Williamson Act Contracts, page 4.2-5). The two parcels were also included on Figure 4.2-2, Williamson Act Contracted Land.
- Response O11-5 The commenter states that the Draft EIR fails to identify and quantify the amount of water delivery systems within the Proposed Project ROW and therefore, does not identify the impacts or mitigate the impacts to water production and delivery systems. With respect to well relocation (if necessary), the commenter is referred to Master Response 4.5. Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.
- Response O11-6 The commenter is concerned about the challenges related to relocating a well (if necessary). The commenter is referred to Master Response 4.5.
- Response O11-7 The commenter is concerned that the project would affect a small, intermittent drainage known locally as “Lipsy Creek.” This feature is unnamed on the U.S. Geological Survey 7.5-minute quadrangle map and other sources, and therefore was not identified by name in the EIR. There would be no structures placed within Lipsy Creek. This drainage was adequately characterized during the analysis of biological resources on the Proposed Project alignment and was identified as a roughly 6-foot wide blue line intermittent stream near Structures #101 and #102. West of Structure #101, this feature transitions into a non-blue line, managed ditch that is closely abutted by orchard trees. Project activities would be greater than 100 feet from the natural portions of the creek and greater than 50 feet from the channelized portions. Project activities would not affect the character of the creek or resources in this drainage. No project activities would be performed in the creek and protective measures would be implemented to avoid and minimize impacts from construction activities adjacent to the creek. Implementation of Mitigation Measures 4.4-2a, 4.4-2b 4.4-9a and 4.4-9b (Section 4.4, *Biological Resources*), and Mitigation Measures 4.8-1 (Section 4.8, *Hydrology and Water Quality*) is adequate to reduce potential impacts to Lipsy Creek to less than significant.
- Response O11-8 The commenter references one sentence in the Draft EIR that indicates that crop dusters can fly as low as several feet above the ground surface to make the case that the Draft EIR aerial spraying discussion is not applicable given that row crops are not the predominant agricultural product in the project area. Although row crops are not the dominant crop in the project area and

pilots working in orchards would not fly several feet above the ground surface, the general discussion of aerial spraying on Draft EIR page 4.7-4 is applicable to the project area, given that some row crops do exist in the area.

The commenter also points out that Mitigation Measure 4.7-6 does not address the ability of farmers to effectively spray orchards or conduct aerial frost control once the line has been constructed. That is correct, as the purpose of Mitigation Measure 4.7-6 is to reduce the potential safety impact to pilots who fly for aerial spraying or for frost control. The commenter appears to speculate that the presence of the transmission line would severely limit the effectiveness of these aerial operations, but does not present any evidence to that effect. There is empirical evidence to the contrary, since agricultural operations have been occurring for years within the existing Rector-Big Creek 3 ROW.

For revisions to the Draft EIR that reflect the use of helicopters for frost control, see Response I95-4.

- Response O11-9 The commenter states that there are homes located to the south of the Proposed Project in the community of Lemon Cove. Please see Response I17-4.
- Response O11-10 The commenter notes that California State Parks has issued a Central Valley Vision Draft Implementation Plan, which includes a proposal to develop a new park at Rocky Hill in Exeter that would celebrate Native American culture, develop trails and viewing platforms to observe rock art, and develop a visitor center. The commenter states that the Draft EIR should identify how this planned park may be impacted by implementation of the Proposed Project.

The commenter is referred to Draft EIR Section 4.5.1, *Methods and Results* (specifically pages 4.5-12 and 4.5-13), which summarizes the Native American consultation undertaken in support of this project. Consultation between SCE and representatives of local Native American groups is ongoing. Identification of issues important to the Native American community has occurred as a result of this contact, and Rocky Hill was specifically identified as an area of concern. Although it does not appear that the Proposed Project would directly impact Rocky Hill, consultation would continue throughout the project concerning this resource. With regard to potential impacts the Proposed Project would have on recreational uses of the proposed park, since the Proposed Project would not traverse through the proposed park and would not contain a residential component that could result in increased use of the park, there would be no direct or indirect impacts to this park. Further, any effect on the community's use and enjoyment of the proposed park is purely speculative, as the park does not currently exist and there is no established level of community use and enjoyment.

Response O11-11 The commenter's request, that the CPUC consider selecting the Alternative 3A alignment, is noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Response O11-12 The commenter is referred to Response O16-4.

Letter O12, Wallace Ranch Water Company

Response O12-1 The commenter is concerned about potential impacts to underground water distribution lines. The commenter is referred to Master Response 4.1.

Response O12-2 The commenter is concerned about potential impacts to irrigation lines and the feasibility of relocating wells (if necessary). Concerning the potential relocation of wells, the commenter is referred to Master Response 4.5. Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

Response O12-3 The commenter expresses support for Alternative 3A primarily for agricultural reasons. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter O13, CA Department of Fish and Game

Response O13-1 The California Department of Fish and Game agrees with the Draft EIR conclusion that construction of the Alternative 3 alignment, as currently proposed through the Stone Corral Ecological Reserve, could have substantial permanent impacts on the vernal pool habitat and hydrology. Comment noted.

Letter O14, CJ Hammers Pump Co.

Response O14-1 The commenter is concerned about the potential impacts to wells and the feasibility of having to relocate them per Mitigation Measure 4.7-11b, particularly with regard to the old wagon wheel-style wells. The commenter is referred to Master Response 4.5.

Letter O15, Rocky Hill Incorporated

Response O15-1 The commenter expresses support for Alternative 3 because Alternative 1 would have a negative impact to their farming operations, including potentially requiring relocation of two mile long irrigation pipeline. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.1 for information regarding replacement or relocation of agricultural irrigation systems.

Letter O16, PACE

- Response O16-1 The commenter cites Chapter 5 of the Draft EIR which states that a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological reserve could not be found (page 5-7). The commenter provides a study identifying and analyzing the Alternative 3A alignment. Please see Master Response 4.6 for information regarding Alternative 3A.
- Response O16-2 The commenter is concerned about the feasibility of relocating wells (if necessary), and whether or not an alternate well location would ultimately be as productive. The commenter is referred to Master Response 4.5.
- Response O16-3 The commenter states that removal of farming operations will remove carbon sequestering vegetation from the environment, resulting in an increase in atmospheric greenhouse gases (GHG). Draft EIR Section 4.3, *Air Quality*, Impact 4.3-8 (page 4.3-24) assesses the Proposed Project's potential generation of short-term and long-term emissions of GHGs, and determines impacts would be less than significant with mitigation. The commenter also states that Alternative 3 would result in the least impact as it would cross the least amount of orchard and cropland. Comment noted.
- Response O16-4 The commenter provides a study which assesses the feasibility of rerouting Alternative 3 around the Stone Corral Ecological Reserve. Please see Master Response 4.6 for information regarding Alternative 3A.
- Response O16-5 The commenter provides a study which assesses the feasibility of rerouting Alternative 3 around the Stone Corral Ecological Reserve, including ROW costs. Please see Master Response 4.6 for information regarding Alternative 3A. Construction costs are not considered in the CEQA evaluation of alternatives, but may be considered by the CPUC in its Certificate of Public Convenience and Necessity (CPCN) process.

Letter O17, Ruddell, Cochran, Stanton, Smith, Bixlar & Wisehart, LLC (representing the Kaweah Delta Water Conservation District)

- Response O17-1 The Draft EIR analysis of biological resource impacts relied on CEQA guidelines to identify any potential conflicts with any approved Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan. Neither the Paregion property nor Hannah Ranch Scott Property are part of an approved plan, therefore, this impact was not considered significant in the Draft EIR analysis. Additionally, field surveys performed by SCE and ESA examined existing biological resources on the Paregion and Hannah Ranch Scott

Properties, which were typical of other portions of the examined alignment. The proposed alignment would not impact any existing biological resources on the two parcels and additionally would not affect any future planned habitat creation or restoration.

- Response O17-2 See Response O17-1.
- Response O17-3 The commenter states that the Draft EIR fails to recognize the legal inability of SCE to obtain/condemn future ROW access over the Kaweah Delta Water Conservation District properties (specifically the Paregion and Hannah Ranch South properties). This is outside the scope of CEQA. Comment noted.
- Response O17-4 The commenter states that the Draft EIR fails to disclose that the proposed alignment is not compatible with the HCP/NCCP planned for the two Water Conservation District parcels (the Paregion and Hannah Ranch South Properties). There are many conservation areas in the regional area with powerlines located within or adjacent to their boundaries, thus, the commenter's concern is not backed up. Examples of conservation lands that also support utilities include the Stone Corral Ecological Reserve, which is traversed by powerlines that do not hamper the high ecological values of the site. Listed species that may occur on the Paregion property, possibly including habitat for valley elderberry longhorn beetle and San Joaquin kit fox, would not be impacted by the Proposed Project. Additionally, the project would minimally affect already disturbed habitat on these sites and would not affect planned future habitat restoration on these sites.

Letter O18, AMEC

- Response O18-1 The commenter is concerned about the feasibility of relocating wells (if necessary) and potential impairments to the recharge capability of the aquifer in the Rayo Ranch/Colvin Mountain area. Naturally, the alluvial deposits (alluvium) thin as one moves east toward the base of the mountain front; the commenter's descriptions concerning the depth of alluvium near the Rayo Ranch and Colvin Mountain area are noted. It is also acknowledged, as the commenter states, that groundwater is not consistently available across the small, alluvial valleys. However, this variability in groundwater supply and availability is true for the region as a whole, as well. The information presented concerning groundwater characteristics and data is noted. The commenter's conclusions that a) the local aquifer system is not laterally extensive, b) the local aquifer has a limited recharge area and c) that seasonal fluctuations in groundwater elevations are indicative of the importance of local recharge are not supported by the existing body of scientific literature (ESA made repeated requests to Paramount Citrus [Paramount] for a copy of the AMEC Geomatrix, Inc. report cited in the comment letter - these requests

were never acknowledged). Though the hydraulic properties (e.g., transmissivity) and groundwater head elevations may vary considerably over short distances, the “aquifer system” is best characterized as a contiguous, though heterogeneous, body of water. As the commenter states, it is obvious that an important source of recharge in this area is Cottonwood Creek. As such, the recharge area should not be considered “local”, as one must, at the least, consider the entire Cottonwood Creek watershed, which extends many miles to the north. Seasonal groundwater fluctuations are simply a function of groundwater discharge (and extraction) and recharge processes (e.g., runoff carried by streams from high up in the Sierras that infiltrates in the lowland, alluvial areas); such fluctuations, considered by themselves, are not an indication of local vs. “non-local” recharge. For further response, the commenter is referred to Master Responses 4.4 and 4.5.

Response O18-2 The commenter is concerned about the potential impact of dewatering activities, and the potential impact to wells relying primarily on flow within bedrock. Dewatering activities would be temporary and the volume of water discharged, compared to the vast size of the regional aquifer, would be negligible. In most cases the water would be discharged to the land surface and thus infiltrate back to the aquifer. Concerning the other issues raised, the commenter is referred to Master Response 4.4.

Response O18-3 The commenter is concerned about new road surfaces potentially impacting recharge areas. The few acres of new road that would be constructed are negligible compared to the hundreds of square miles of watershed areas draining from the east to the west via surface runoff and/or subsurface flow through bedrock. Many previous studies have indicated that runoff delivered by streams is the principal source of recharge for this area. Another important source of recharge in this area is applied irrigation water and, again, a few acres of road is negligible compared to the thousands of irrigated acres in the Project area. Besides, water that runs off the compacted road would likely end up just infiltration the more permeable land surface just beyond the road anyway, and would thus still be able to eventually recharge the aquifer (at least in part).

Response O18-4 According to DWR (2004), all the alluvial areas within the Project area (whether they are shallow or deep) are part of the same aquifer system (i.e., the Kaweah Subbasin). Concerning an actual “aquifer”, the Kaweah Subbasin is the only one that has been identified for the Project, and even this subbasin is essentially contiguous with the other areas that make up the greater Tulare Lake basin. With respect to the saturated zone, all previous studies suggest that the aquifer in the Project area (and the entire southern San Joaquin Valley for that matter) is a single, contiguous body of water. Though, the hydraulic properties (e.g., transmissivity) and subsequent

groundwater availability may vary substantially from one place to another (primarily due to the variability in the texture of the subsurface). Dewatering activities would be temporary and the volume of water discharged, compared to the vast size of the regional aquifer, would be negligible. In most cases the water would be discharged to the land surface and thus infiltrate back to the aquifer. Concerning the other issues raised, the commenter is referred to Master Response 4.4.

- Response O18-5 The commenter is concerned about potential impacts to groundwater recharge (from road installation) and groundwater flow (from pole installation), and about the feasibility of relocating existing wells (if necessary). With respect to potential impacts on groundwater recharge, the commenter is referred to the Response to Comment O18-3. Concerning potential impacts to groundwater flow and the feasibility of relocating existing wells, the commenter is referred to Master Responses 4.4 and 4.5, respectively.
- Response O18-6 The Proposed Project and alternatives would have no impact upon groundwater resources; the alternatives were analyzed in sufficient detail and consistent with the requirements of CEQA. With respect to potential impacts on groundwater recharge, the commenter is referred to the Response to Comment O18-3. Concerning potential impacts to groundwater flow, the commenter is referred to Master Response 4.4.

Letter O19, Baker Manock & Jensen (representing Paramount Citrus Association)

- Response O19-1 The commenter observed that the majority of persons speaking at the July 23rd public comment meeting expressed their support for Alternative 3, and that this degree of agreement amongst the public is uncommon for most EIRs. This observation is noted, but on its own does not provide any substantive matter regarding the adequacy of the environmental analysis in the Draft EIR. The commenter provides more specific comments below. Regarding Alternative 3, the commenter is referred to Master Response 4.6.
- Response O19-2 The commenter expresses the opinion that the Draft EIR underestimates the impacts on agriculture from Alternatives 1, 2 and 6 because using farming equipment under or near high voltage transmission lines is infeasible and unsafe. See Response O2-2, which addresses safety hazard issues.
- Response O19-3 The commenter's primary expressed concern is that that the Draft EIR provides insufficient information for a fair comparison of the alternatives' relative impacts because the Draft EIR analysis does not distinguish between impacts to the existing ROW and the new ROW areas. The commenter also

expresses the opinion that this inadequacy is due to the Draft EIR's mistaken assumption that any crop with a normal growing height below 15 feet can continue to be commercially farmed under the transmission lines and consequently and also the result that all agricultural impacts to the existing ROW have already occurred.

The Draft EIR assumes that crops which can be commercially productive when pruned to under 15 feet could continue to be farmed within the existing ROW areas and their cultivation would be permitted under the new proposed ROW. This assumption is consistent with current farming practices within the existing ROW. (See also Response O2-2 which assesses the safety hazards of cultural practices.) Table 4.2-1 (Appendix G) identifies the crops currently grown in the ROW of the Proposed Project and alternatives and it is noteworthy that all of the crops shown for Alternative 3 are all grown in existing ROW. As crops are routinely grown in transmission line ROWs, the commenter's assertion that all of the agricultural impacts within the existing ROW have already occurred is incorrect. New future impacts are projected to occur in the area located under the existing towers, in the maintenance buffers surrounding the towers, and for crops that cannot be productive when pruned to under 15 feet (such as walnuts). The Draft EIR is correct to include evaluation of these impacts in the analysis. The Draft EIR performs a similar analysis of the impacts under the other alternatives so that each alternative's aggregate impact can be compared between the alternatives. The alternatives' relative agricultural impacts are based on their comparative lengths.

Response O19-4 The commenter expresses the opinion that impacts of the Proposed Project and Alternatives 2 and 6 are substantially greater than Alternative 3, because they include new ROW through agricultural land. The commenter asserts that commercial citrus farming near or within the ROW will be infeasible. See Response O19-3.

Response O19-5 The commenter provides an analysis of impacts to Paramount Citrus Farming. Comment noted. The commenter asserts that commercial citrus farming near or within the ROW will be infeasible. For a discussion of the safety of using farming under transmission lines, see Response O2-2. For a discussion of impacts to agricultural wells, see Master Response 4.5. For impacts due to the removal of wind machines and irrigation systems, see Master Response 4.1.

Response O19-6 The commenter is concerned about the safety risk of farming equipment use under or near transmission lines. See Response O2-2, which addresses farming equipment hazards.

Response O19-7 The comment, which states that the Draft EIR fails to consider that land outside the ROW could be converted to non-agricultural land due to

logistical considerations of farming practices, is acknowledged. For impacts related to irrigation systems see Master Response 4.1. For impacts related to safety hazards of cultural practices, see Response O2-2.

- Response O19-8 The commenter expresses the opinion that the Draft EIR does not sufficiently address the conflicts between Alternatives 1, 2 and 6 and local land use policies. See Response O10-8, and Response O25-6.
- Response O19-9 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response O19-10 The commenter expresses the opinion that the Draft EIR underestimates the impacts on agriculture from Alternatives 1, 2 and 6 by not distinguishing between impacts in existing ROW and proposed new ROW areas. See Response O19-3 for a discussion of crops growing in existing ROW. Furthermore, as discussed in Appendix G (Final EIR Section 4.2, *Agricultural Resources*), impacts to Farmland are considered significant if Farmland would be precluded from agricultural use during construction or operation of the project. Even if the agriculture grown within the ROW is of different type or quality than agriculture grown outside of a ROW (as asserted by the commenter), from a CEQA perspective the land would still be usable for agricultural purposes. Therefore, the project would not result in the conversion of Farmland to non-agricultural uses.
- Response O19-11 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response O19-12 The commenter notes that the new ROW associated with Alternative 3 (across Stokes Mountain) is primarily grazing land with little agricultural value. This statement is consistent with the analysis and discussion in the Draft EIR, and does not express a contrary opinion. No response is necessary.
- Response O19-13 The comment, which expresses the opinion that Alternative 3 best serves the local policies aimed at preserving agricultural lands, is noted. See Response O19-8.
- Response O19-14 The commenter asserts that the only portion of Alternative 3 that could have new impacts to agricultural resources is the new ROW across grazing land on Stokes Mountain, and, therefore, Alternative 3 would have no new impacts to agricultural resources. The commenter fails to consider the impact to agricultural resources and important farmland that would occur within the existing ROW for Alternative 3 because high-value crops are currently present in much of that ROW. CEQA requires that an EIR consider impacts to the environment as determined from changes to the existing baseline. The crops present in the existing ROW are part of baseline conditions, and so impacts to those crops and loss of important farmland resulting from the

construction of Alternative 3 must be quantified, disclosed, and considered in the determination of the Environmentally Superior Alternative. The commenter is also referred to Master Response 4.1 for additional information regarding agriculture resources, and to Master Response 4.6 for information regarding Alternative 3.

- Response O19-15 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response O19-16 The commenter states that the alternatives were not adequately analyzed with respect to groundwater, the eastern Project area was not adequately characterized concerning groundwater, and potential groundwater impacts were not adequately addressed. The Proposed Project and alternatives would have no impact upon groundwater resources; the alternatives were analyzed in sufficient detail and consistent with the requirements of CEQA. The characterization of groundwater resources and aquifers presented in Draft EIR Section 4.8, *Hydrology and Water Quality*, relied upon reputable literature sources and published information; the scope of the information presented was adequate considering the Proposed Project would have no impact upon existing groundwater resources. We are aware of Mr. Bean's Hydrology Report, as referenced by the commenter. However, we disagree with the commenter's assertion that Mr. Bean's report presents "significant evidence" that groundwater impacts could occur as a result of the project. The commenter is further referred to Master Response 4.4.
- Response O19-17 The commenter is concerned about the feasibility of relocating existing wells (if necessary). The commenter is referred to Master Response 4.5.
- Response O19-18 The commenter is concerned about potential impacts to groundwater recharge (from road installation) and groundwater flow (from pole installation), and about the feasibility of relocating existing wells (if necessary). With respect to potential impacts on groundwater recharge, the commenter is referred to the Response to Comment O18-3. Concerning potential impacts to groundwater flow and the feasibility of relocating existing wells, the commenter is referred to Master Response 4.4 and 4.5, respectively.
- Response O19-19 The commenter states there is no feasible mitigation for the potential impacts to groundwater flow or existing wells. There would be no potential impact to groundwater flow (see Master Response 4.4), as such, no mitigation is necessary. Concerning existing wells, the commenter is referred to Master Response 4.5.
- Response O19-20 The commenter asserts that the other alternatives would have significant impacts to groundwater resources, and Alternative 3 would not; therefore, Alternative 3 should be considered the Environmentally Superior Alternative.

Please see Master Responses 4.4 and 4.5 for information regarding groundwater resources and wells, respectively.

- Response O19-21 The commenter expresses opposition to Alternatives 2 and 6, and claims that the Draft EIR fails to specifically address potential impacts to recreation, cultural resources, aesthetics, and environmental values in the Sentinel Butte (Antelope) Valley. The commenter is referred to Section 4.1, *Aesthetics*, Section 4.5, *Cultural Resources*, and Section 4.13, *Recreation*, which address impacts for the entire length of the Alternative 2 and Alternative 6 alignments, including the Sentinel Butte Valley. The commenter is also referred to Master Response 4.2 which addresses the historic “Valley of the Sun” gathering in the Sentinel Butte Valley.
- Response O19-22 The commenter states the opinion that Alternative 3 creates “the least amount of new aesthetic impact.” The commenter also questions the Draft EIR’s lack of discussion of the reduced visual impact associated with the proposed replacement of the existing lattice tower structures with new monopoles.
- CEQA analyses generally evaluate the nature and magnitude of resource impacts to determine if they represent “significant” or “less than significant” changes to the physical environment. Consequently, per CEQA methodology, two impacts would generally be considered equivalent in terms of their CEQA significance if the intensity of the impacts are both “less than significant” even if the nature or cause of their resources impacts may be different. The visual analysis evaluated the overall resulting impact of the project in the context of the existing landscape for the visual impact determination. While the commenter is correct that replacement of existing lattice towers by the monopoles might be expected to reduce the aesthetic impacts, the Draft EIR analysis adopted a more conservative approach by basing its analysis primarily on the incremental impact of the added ROW sections. As discussed in Section 4.1, *Aesthetics*, under all alternatives and the Proposed Project, the visual impacts were determined to be less than significant after mitigation.
- Response O19-23 The comment, which expresses support for Alternative 3A for efficiency and public safety reasons, is noted. Please see Master Response 4.6 for information regarding Alternative 3A.
- Response O19-24 This comment is a conclusion offered by the commenter and does not identify any new issues that were not identified in the preceding comments. The commenter is referred to the comment responses, above.
- Response O19-25 See Response to Comments O18-1 through O18-6.

Letter O20, California Farm Bureau Federation and Tulare County Farm Bureau

- Response O20-1 The commenter is concerned that soils will not be able to be properly restored to the current status, and proposes a suggested process for mitigation (discussed later in the comment letter). Comment noted. See Response O20-19.
- Response O20-2 The commenter is concerned about dust emission impacts to crops. The Draft EIR addresses impacts resulting from dust in Section 4.2, *Agricultural Resources* (Impact 4.2-1), and Section 2.3, *Air Quality* (Impact 4.3-1 and Impact 4.3-3). For additional analysis of the effects of dust on agriculture, see Master Response 4.1.
- Response O20-3 The commenter expresses the opinion that the Draft EIR fails to recognize the extent of impacts resulting from tree and crop removal. The Draft EIR is consistent with the comment that the impacts from removing crops apply not only to walnut and orange orchards, but to any permanent crop. See Appendix G (Final EIR Section 4.2, *Agricultural Resources*), Mitigation Measure 4.2-1b, which requires SCE to supply replacement crops and trees at a mitigation ratio of one to one, upon completion of construction. Also, as stated in the mitigation measure, SCE will coordinate planting of replacement crops and trees with landowners. By coordinating with landowners, cultural practices as well as water and nutritional requirements for young plants would be taken into account during replanting. For additional concerns regarding cultural practices and irrigation infrastructure, see Response O2-2 and Master Response 4.1, respectively.
- Response O20-4 The commenter is concerned that the vegetation height allowance of 15 feet may decrease in the future, in which case other orchard crops besides walnuts may become unproductive. The CPUC's General Order 95 (G.O.95) and the North American Electric Reliability Corporation (in FAC-003-1) have established Tree Trimming requirements for determining minimum tree-to-line clearances to be maintained under normal operating conditions. To comply with the Tree Trimming and Vegetation Management requirements as established by the CPUC and NERC, SCE has created supplementary guides and standard practices to assure compliance with regulatory requirements. As a result, SCE has developed the standard vegetation management (tree trimming) guideline of 25 feet plus one year's growth as the minimum clearance distance a tree should be maintained from an energized 220 kV conductor. As an alternative to these guidelines and standard practices, SCE has provided an option to property owners of maintaining trees at a maximum tree height of 15 feet from the surface of the ground in order to maintain adequate tree to conductor clearances. This

second guideline would be applicable to the Proposed Project and alternatives.

The Draft EIR assesses impacts to crops based on current CPUC regulations and SCE guidelines. The analysis provided in the Draft EIR is adequate to determine the potential for vegetative height allowances to result in the conversion of Farmland to non-agricultural use, which fulfills CEQA requirements. The commenter's request, that SCE be required to include in their form easement a stipulation that landowners will not be required to have their trees pruned below 15 feet, is outside the purview of CEQA requirements.

In addition, the commenter's statement that trees would have to be trimmed every day to stay under the 15-foot height limit is incorrect. In some areas (including the San Joaquin Valley transmission line corridor), SCE may perform tree trimming two or more times throughout the year in order to allow a tree to have a higher base level and still maintain safe tree to conductor clearances.

Response O20-5 The commenter states that potential water quality impacts (beyond those addressed in the Draft EIR) were not adequately addressed. The commenter also questions the feasibility of relocating existing wells (if necessary). The only potential water quality impacts related to the Proposed Project are related to construction and dewatering activities, and these are addressed in Draft EIR Section 4.8, *Hydrology and Water Quality*; the Project would have no other potential impacts upon surface water or groundwater quality. Concerning the potential relocation of an existing well, the commenter is referred to Master Response 4.5.

Response O20-6 The commenter is concerned that impacts to cultural practices, such as a potential increase in hazardous risk to helicopters used for aerial spraying and frost protection, would result in the loss of additional Farmland. The commenter is referred to Response O2-2.

Response O20-7 This comment asserts that the Draft EIR makes too fine a distinction in saying that project would not cause growth. The comment also states the opinion that while Project implementation might not directly cause growth, the resulting electrical system improvement could indirectly assist growth and agricultural land conversion.

The Draft EIR concluded the project would neither directly nor indirectly induce growth. As stated on page 6-2 of Chapter 6, *CEQA Statutory Sections*, "(g)rowth in the southeastern portion of the San Joaquin Valley is planned and regulated by applicable local planning policies and zoning ordinances. The provision of electricity is generally not considered an obstacle to growth nor does the availability of electrical capacity by itself normally ensure or

encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth. Therefore, the Proposed Project would not indirectly induce growth by creating new opportunities for local industry or commerce.”

Cumulative loss of Farmland from growth in Tulare County is addressed in the Draft EIR, Section 4.2, *Agricultural Resources*, pages 4.2-16 to 4.2-17. In general, the acreage of Farmland in Tulare County is expected to decrease as a result of non-project related growth pressure within the County. The Proposed Project would contribute incrementally to this decrease and consequently, the Draft EIR concludes that the project would have a significant and unavoidable cumulative impact on agricultural resources in the region.

Response O20-8 The commenter indicates that the Draft EIR did not adequately disclose the effects that traffic impacts would have on harvest season operations and points out that transportation of farm trucks and equipment cannot be delayed during certain times of the year. Although impacts to harvest season operations are not specifically identified in the Draft EIR Traffic and Transportation section (Section 4.14), general impacts to traffic due to construction activities are presented in the Impact 4.14-1 discussion and implementation of Mitigation Measures 4.14-1a and 4.14-1b would require SCE to coordinate all construction activities at private road crossings with the applicable private property owners and develop a process for communication with affected residents and landowners prior to the start of construction. Implementation of these measures would result in needed coordination between SCE and property owners so that harvest operations would not be significantly impacted by project related road and lane closures.

In addition, construction impacts to designated Farmland are discussed under Impact 4.2-1 in *Agricultural Resources* (Draft EIR Section 4.2.4). Pursuant to Draft EIR Mitigation Measure 4.2-1b, SCE and/or its contractors would be required to coordinate construction scheduling as practical to minimize disruption of agricultural operations by scheduling excavation to occur before or after the growing season.

Response O20-9 The commenter is concerned that the acquisition of conservation lands that support special-status plants will have impacts to agricultural resources. This concern is unfounded, as SCE would purchase credits in an established mitigation bank such as the 497-acre Sand Creek Conservation Bank operated by Wildlands, Inc. in Tulare County. This bank provides mitigation credits for vernal pool ferry shrimp, vernal pool tadpole shrimp, California tiger salamander and San Joaquin kit fox. As the bank is already a

functioning entity, participation in the bank would not remove agriculture from production. Such banks typically have a grazing management plan to control noxious weeds, and thus provide benefits to biological and agricultural resources.

- Response O20-10 The comment, which expresses support for Alternative 3A for agricultural, socioeconomic, and biological reasons, is noted. Please see Master Response 4.6 for information regarding Alternative 3A, and Master Response 4.7 for issues outside the scope of CEQA, including job loss.
- Response O20-11 The commenter recommends establishment of an Agricultural Advisory Committee. See Response O20-19.
- Response O20-12 The commenter indicates that Mitigation Measure 4.7-3b should be modified to take advantage of reports and data that are available upon request from the County Agricultural Commissioner. Mitigation Measure 4.7-3b already requires that the plan be prepared in consultation with the County Agricultural Commission. However, the Mitigation Measure has been modified to indicate that if through consultation with the County Agricultural Commission it is determined that soil sampling is not warranted; documentation to support such a determination must be provided.

Mitigation Measure 4.7-3b: SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. If through consultation with the County Agricultural Commission it is determined that soil sampling is not warranted, documentation to support such a determination must be provided to the CPUC. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils; or the Plan shall provide documentation to support a determination that soil sampling is not warranted. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC prior to construction.

- Response O20-13 The commenter notes that the Draft EIR should acknowledge electric field effects on apiaries. Presumably the comment is intended to address the

potential causes of “Colony Collapse Disorder,” (CCD) which is a worldwide affliction that has caused the collapse of millions of bee colonies nationally. There has been considerable speculation and research on the causes of CCD. At this time the leading suspected causes of this phenomenon are pathogens, nutrition problems (e.g., from nectar or pollen dearth) and chemicals (e.g., pesticides) rather than electromagnetic sources, as once speculated (U.S. Department of Agriculture, 2009).

- Response O20-14 The commenter is generally concerned that the use of private ranching roads as access roads would have impacts on adjoining properties. Impacts from access roads are discussed in Section 4.2, *Agricultural Resources*, and Section 4.3, *Air Quality*. Mitigation Measure 4.3-1b (page 4.3-19 to 4.3-20) would minimize construction dust on crops adjacent to all access roads and work areas. For additional impacts related to dust, see Master Response 4.1.
- Response O20-15 The comment, which expresses the opinion that maintaining conservation easements does nothing to replace the loss of agricultural resources from the Proposed Project and alternatives, is noted. The commenter is correct that a conservation easement does not create new Farmland. However, the easement preserves Farmland that could otherwise be converted to non-agricultural use, thereby preventing likely future loss of Farmland. Additionally, as noted in Mitigation Measure 4.2-2 (page 4.2-14), the mitigation lands must be of equal or better quality than the impacted lands, ensuring the quality of the property protected. The loss of Farmland acreage is recognized in the Draft EIR as a significant and unavoidable impact.
- Response O20-16 The commenter states that siting lines along parcel boundaries does not eliminate but can reduce long-term effects to agricultural resources. Comment noted. Generally, the Proposed Project and alternatives’ ROW routes are located along access routes or at peripheries of parcels. The proposed ROW for the Proposed Project and alternatives are located to minimize the fragmentation and disruption to the agricultural properties within each route.
- Response O20-17 Commenter expresses concerns about the implementation of the Mitigation Monitoring, Reporting and Compliance Program (MMRCP) noting that information should be readily available to the public and that the utility should not retain too much discretion. Commenter requests that copies of the procedures and compliance requirements as well as plans/documentation required to be submitted to the CPUC as part of the MMRCP be disseminated to landowners impacted by the Proposed Project. Additionally, the commenter request that the Dispute Resolution Process provide for an expedited resolution option (i.e., a separate process with a specific CPUC designee) to account for additional impacts that could occur to agricultural resources due to delay during the process.

As stated in Chapter 8, *Mitigation Monitoring, Reporting and Compliance Program*, on page 8-3, “If and when the Proposed Project has been approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final Environmental Impact Report (EIR), as adopted”. A copy of this Final Plan is included, in an easy to read format, in Appendix H of this document. Regarding additional plans and documentation required to be submitted to the CPUC as part of the MMRCP, as stated on page 8-8, “The public is allowed access to records and reports used to track the monitoring program...on request.”

While the CPUC recognizes the commenter’s concern regarding the Dispute Resolution Process, the CPUC requires a reasonable amount of time to process a written “notice of dispute”; therefore, there will be no change to the process. However, it should be noted that in general the majority of disputes are resolved by implementation of Step 1 and/or Step 2.

Response O20-18 The comment expresses support for Alternative 3A for agricultural and EMF reasons, and because it adheres to the Garamendi Principles as reflected in Senate Bill 2431. Comment noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Response O20-19 The commenter requests establishment of an Agricultural Advisory Committee to make non-binding findings and recommendations regarding agricultural issues. While the formation of such a committee may indeed create opportunity for better communication among the parties, it does not meet the criteria for inclusion as a CEQA mitigation. According to Section 15126.4 (2) of the CEQA Guidelines, “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments.” The CPUC has no mechanism under CEQA law to compel SCE to create and participate in a committee. Further, since the Agricultural Advisory Committee’s recommendations would not be binding, the creation of such a committee may not result in the minimization of significant adverse impacts.

The commenter expresses the opinion that Mitigation 4.2-1a, related to soil disruption and compaction during construction, is too broad and lacks sufficient details, and requests that the Farm Bureau Federation’s proposed Agricultural Advisory Committee develop best management practices to minimize soil disruption. On the contrary, the level of detail provided in Mitigation Measure 4.2-1a is sufficient to mitigate potential impacts to soil to a less than significant level as described on page 4.2-11 and 4.2-12 of the Draft EIR. The measure identifies a performance standard (within 5 percent of the original soil density), and describes methods that can be used to

(1) avoid unnecessary soil compaction and (2) return compacted soil to within the prescribed density.

The commenter also requests a mechanism to inform the development of a construction schedule about local cultural practices, before SCE presents its construction plan to landowners. With respect to minimizing alignment conflicts that limit cultural practices, the commenter states that a review of common access points for multiple property owners could be addressed before final alignment routes are adopted. The commenter is referred to Draft EIR Section 4.14, *Traffic and Transportation*. Implementation of Mitigation Measures 4.14-1a and 4.14-1b would require SCE to coordinate all construction activities at private road crossings with the applicable private property owners and develop a process for communication with affected residents and landowners prior to the start of construction. Implementation of these measures would accomplish what the commenter has requested.

For impacts to irrigation systems and dust control, the commenter is referred to Master Response 4.1. For impacts to water wells, the commenter is referred to Master Response 4.5.

Response O20-20 The comment, which expresses support for Alternative 3A for agricultural reasons, is noted. Please see Master Response 4.6 for information regarding Alternative 3A. The commenter is also concerned that the mitigation measures for biological resources requiring mitigation through acquisition of land that supports special-status plants would have impacts to agriculture. This concern is unfounded, as SCE would purchase credits in an established mitigation bank such as the 497-acre Sand Creek Conservation Bank operated by Wildlands, Inc. in Tulare County. This bank provides mitigation credits for vernal pool ferry shrimp, vernal pool tadpole shrimp, California tiger salamander and San Joaquin kit fox. As the bank is already a functioning entity, conservation easement land could not remove agriculture from production.

Regarding the comment that conservation easements on existing agricultural resources do not eliminate the effect of lost agricultural resources, please see Response O20-15. Regarding concerns about impacts to irrigation systems and wells, please see Master Responses 4.1 and 4.5, respectively. Regarding concerns about tree maintenance please see Response O20-4. For economic effects of removing agriculture from production, please see Master Response 4.7. Regarding the creation of an Agricultural Advisory Committee, please see Response O20-19.

Letter O21, Donald Lawrence Construction Company

- Response O21-1 The commenter expresses general support for Alternative 3. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.
- Response O21-2 The commenter recommends that the sections of the selected alignment within Visalia should be developed as a “Publically Supported Landscape Trail System.” Comment is acknowledged. Under CEQA, mitigation measures can only be imposed to reduce the severity of potential significant impacts. In this case, there is an insufficient nexus between implementation of the Proposed Project and the recommended landscape trail. Consequently, the commenter’s proposed mitigation is inapplicable to the Proposed Project. Nonetheless, it should be noted that development of the Proposed Project would not preclude future development of such a “Publically Supported Landscape Trail System.”
- Response O21-3 The commenter expresses the opinion that visual impacts of the Proposed Project’s upgrade to the existing transmission line system would adversely impact the property values of existing and planned homes in the River Run Ranch located near the ROW. See for Response I68-4 for discussion of visual impacts to residential homes and Master Response 4.7 (Non-CEQA Issues).
- Response O21-4 The commenter recommends that development of multi-use public space areas within the sections of the selected alignment in Visalia as part of the project would provide community benefits that would offset adverse economic and social impacts to local residents. See Response O21-2.

Letter O22, Farmland Conservation Strategies

- Response O22-1 The Woodward-Clyde reports referenced by the commenter (*Focused Biological Surveys for Eight Target Species in Tulare County, California*, for the Tulare County Association of Governments in February, 1993; and *Focused Biological Surveys for Vernal Pool Fairy Shrimp (Branchinecta lynchi) in Tulare County, California*, September, 1993) are unpublished reports that document biological surveys that were performed in portions of Tulare County in 1992 (rare plants) and 1993 (vernal pool fairy shrimp). The commenter identifies that he was a principal investigator for the 1992 survey effort and is familiar with biological resources in the local area. The report is not publically available, but was referenced by the USFWS in their listing proposals for several listed plant and wildlife species in the local project area, including San Joaquin Valley Orcutt grass and Hoover’s spurge.

The commenter asks what the specific Primary Constituent Elements (PCEs) indicate the potential presence of Hoover's spurge and San Joaquin Valley Orcutt grass and requests their specific distribution along alternative routes. The PCE definition for these species, as specified in the USFWS critical habitat designation for these species, is provided on Draft EIR page 4.4-21, and states that, "PCEs for ... San Joaquin Valley Orcutt grass and Hoover's spurge generally coincide with the presence of topographic features characterized by mounds and swales that provide pond continuously or intermittently, depressional features including isolated vernal pools underlying restrictive soil layers that continuously hold water for a minimum of 23 days in all but the driest years." The presence of vernal pools, swales or seasonally pooled depressions within areas that were designated as critical habitat for Hoover's spurge and/or San Joaquin Valley Orcutt grass were considered as potential indicators of species presence.

The commenter states that the Draft EIR does not specifically discuss the nature or specific location of potential habitat that may support Hoover's spurge and San Joaquin Valley Orcutt grass along Alternatives 2 and 6. The Draft EIR generally identifies the location and extent of habitat within each of these alignments (see page 4.4-48 for Alternative 2 and page 4.4-59 for Alternative 6. The 2009 surveys focused on determining the potential presence of Hoover's spurge and San Joaquin Valley Orcutt grass in the alignments; however, did not accurately map the distribution of identified habitat elements. Hence, the Draft EIR states that "the precise distribution of pools needs to be further examined within the critical habitat unit to determine the extent of direct impacts." (Draft EIR, page 4.4-48 and 4.4-59)

The commenter notes that a 1992 botanical survey failed to identify potential habitat for Hoover's spurge and San Joaquin Valley Orcutt grass near the communities of Elderwood and Woodlake. The USFWS designated critical habitat for Hoover's spurge on August 6, 2003 (Federal Register 68:46683 pdf), which was revised on August 11, 2005 (Federal Register 70:46923 pdf). Species-specific unit descriptions and maps were published on February 10, 2006 (Fed. Reg. 71:7117). The 1992 Woodward-Clyde botanical report was one of the references cited by in the 1997 listing of Hoover's spurge by the USFWS, and was considered in their analysis of habitat suitability for Hoover's spurge and San Joaquin Valley Orcutt grass in the Spring Gap area. Based on their assessment, the USFWS identified Map Unit III-15d as the Tulare Core Area within the Southern Sierra Foothills region (as identified in Draft EIR Figure 4.4-4, Designated Critical Habitat, page 4.4-14). Considerable study has gone into the regional distribution of vernal pool habitat since the 1992 Woodward Clyde report was prepared, and the Draft EIR correctly defers to the USFWS' more recent interpretation of available habitat for Hoover's spurge and San Joaquin Valley Orcutt grass.

The commenter incorrectly quotes the June 2008 Stebbins Biological Resources Study Report, stating that, “there is little likelihood that Hoover’s spurge or San Joaquin Valley Orcutt grass occur along the proposed routes outside of the (Stone Corral Ecological Reserve).” This is incorrect, as the Stebbins report identifies that Hoover’s spurge has “moderate potential on Route 2 near Colvin Mtn. (page 11),” and San Joaquin Valley Orcutt grass has, “moderate potential (on) Route 2 near Colvin Mtn. and Spring Gap.” The Stebbins report specifically states that, “Vernal pool habitats in the Spring Gap and other eastern segments of the route (Alternative 2) could potentially support several listed species of vernal pool shrimp, the California tiger salamander, Hoover’s spurge and San Joaquin Orcutt grass.” In the absence of focused surveys to establish the absence of Hoover’s spurge and San Joaquin Orcutt grass in the proposed alignments, which are within the historic range and designated critical habitat for both species, they are presumed present within suitable habitat.

Regarding the comment about the 2009 rainfall season, SCE’s senior consulting botanist John Stebbins noted that the seasonality and growth of vernal pool plants was atypical during 2009 surveys. The Draft EIR statement that, “vernal pool habitat along Alternatives 2, 3 and 6 may not have been apparent during field surveys,” remains valid. The intention of the statement was to identify that in-depth studies may not have adequately identified the distribution of rare plants and wildlife on the alignments and that additional surveys are needed to establish the presence or absence of select biological species.

Response O22-2 The commenter states that several additional details should be considered in the Draft EIR. Specifically, the commenter identifies that high quality vernal pool habitat is, “strictly limited to the boundaries of the (Stone Corral Ecological Reserve) and further limited to the large claypan vernal pools located in the southwest corner of the Stone Corral Ecological Reserve north of Avenue 384.” The commenter’s statement that, “land adjacent to the Reserve is developed to agricultural uses, is abandoned farmland or railroad ROW, or non-native grassland that does not support vernal pools,” is mostly true. However, the commenter later qualifies this statement by noting that degraded vernal pool habitat is present in abandoned farmland located adjacent to the Reserve.

As the July 9, 2009 (Pittman) technical memorandum identifies, other resources besides vernal pools need to be considered in determining whether an alternative is feasible. Specifically, the presence of residential dwellings in combination with vernal pool habitat (albeit, potentially low quality habitat) was weighed in considering alternative alignments.

Response O22-3 See Response I79-2.

Response O22-4 The comment, which states that Alternative 3A refutes the Draft EIR's conclusion that impacts to biological resources along Alternative Route 3 would be significant unmitigable, is noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter O23, Merryman Ranch Company

Response O23-1 The commenter expresses concern for the loss of agricultural land and ancillary facilities (irrigation lines, wind machines, etc.) on his ranch if Alternative 1 is selected. Please see Master Response 4.1 for information regarding agricultural resources.

Response O23-2 The commenter notes that his property contains some of the first orange groves planted in Tulare County and that the groves represent an important link to the region's past.

The commenter is referred to page 4.5-16, *Historical Agricultural Landscape*. The agricultural landscape, inclusive of all the orchard land on the valley floor, and contributing elements through which the Proposed Project or alternatives would be constructed, have been evaluated as eligible for listing in the California Register per Criterion 1 because of their contribution to the historic development of the California citrus industry, for which the Visalia area is known. While implementation of the Proposed Project would impact the historic agricultural landscape via the removal of citrus trees, the impact would be so small as to not be considered significant pursuant to §15064.5. No mitigation is required.

Letter O24, Southern California Edison Company

Response O24-1 The Applicant expresses the opinion that the Draft EIR inappropriately modifies SCE's basic project objectives for the project. The Applicant is concerned that since the CPUC did not adopt all of SCE's basic project objectives that the environmental document failed to capture important considerations that SCE took into account in developing alternatives and selecting the project.

Although it is common for an applicant to include their project objectives within their application materials submitted to a public agency, in accordance with CEQA Section 21082.1(c)(3), documents prepared in satisfaction of CEQA, including an Environmental Impact Report, Negative Declaration, or like document, must "reflect the independent judgment of the lead agency." Therefore, as the lead agency under CEQA, the CPUC (and its designated

representatives) have sole discretion and final responsibility for the adequacy and final authority on all questions concerning the content and quality of the EIR.

Moreover, the lead agency must satisfy Section 15124, Project Description, subdivision (b) of the CEQA Guideline which clearly state that:

A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. *The statement of objectives should include the underlying purpose of the project* [emphasis added].

As discussed in Chapter 3, *Alternatives and Cumulative Projects*, the CPUC conducted an independent assessment to “better define the most important basic project objectives of the Proposed Project.” Consequently, it is within CPUC’s legitimate purview to act upon its independent judgment and define the most important project objectives and rely upon those objectives as the foundation for the impact analysis and development of a reasonable range of alternatives.

Response O24-2 The Applicant claims that the rationale for choosing Alternative 2 as the Environmentally Superior Alternative is unsupported, based on the following reasons:

- no support for statement that other crops would not be planted in ROW
- Draft EIR could have mitigation requiring taller poles in areas where walnut trees are located
- does not adequately consider federally-protected resources on Alternatives 2, 3, and 6

With regard to the Applicant’s first point, there is sufficient evidence in the record to conclude that walnut trees within the ROW could not simply be replaced with another type of crop. Comments by several local growers during the public scoping period stated that it would not be feasible to plant a replacement crop (e.g., oranges) in the ROW where the replacement crop would still be surrounded by the original crop (e.g., walnuts). Reasons cited included inconsistent and/or incompatible requirements for irrigation, fertilization, and chemical treatment for pests or disease (e.g., see scoping comments of Brian Blain).

Regarding the potential use of taller poles to reduce the impact to walnut trees, please see Response O24-6, below.

Finally, the Applicant does not say how the federally-protected resources on Alternatives 2, 3, and 6 were inadequately analyzed. The Applicant is referred to Response O22-1 and Response O24-89 for further information regarding the consideration of federally-protected resources.

Response O24-3 The Applicant indicates that EMF discussions should not be included within the Hazards and Hazardous Materials section or anywhere within the main body of the EIR because EMF is not considered a CEQA issue. To clarify, the draft EIR does not consider electric and magnetic fields (EMF) in the context of the CEQA analysis of potential environmental impacts because [1] there is no agreement among scientists that EMF creates a potential health risk, and [2] there are no defined or adopted CEQA standards for defining health risk from EMF. However, studies that have been conducted on EMF effects on the physical functioning of surgically implanted medical devices, such as pacemakers and defibrillators, are not considered inconclusive. Therefore, the effects of EMF on surgically implanted devices are addressed under Impact 4.7-10 in Section 4.7, *Hazards and Hazardous Materials*, and in Master Response 4.3.

The CPUC believes it is appropriate to discuss EMF in the Project Description of CEQA documents (see Section 2.9) for informational purposes only, particularly related to the no cost and low cost measures that would be implemented for the project as required by CPUC Decision D.06-01-042.

Response O24-4 The Applicant expresses the opinion that the Draft EIR does not fully account for many current agricultural related activities in the region that are similar to construction activities and operations. Comment noted. The visual setting is described in Section 4.1, *Aesthetics*. The current traffic conditions in the area are discussed in Section 4.14, *Transportation and Traffic*. Hazardous material use the area is discussed in Section 4.7, *Hazards and Hazardous Materials*. Noise generating activities are discussed in Section 4.10, *Noise*.

Response O24-5 The applicant requests edits to page ES-1 to correct the name of the second circuit. In response to this comment, the text from the Draft EIR (Executive Summary, page ES-1) has been clarified as follows:

...while the other two lines begin at Big Creek and terminate at the Springville 220/66 kV Substation (Big Creek 3-Springville 220kV transmission line and Big Creek 4-Springville 220 kV transmission line).

Response O24-6 The applicant states that Draft EIR Table ES-2 (page ES-14) is incorrect in its finding that the impacts to existing walnut orchards in the proposed ROW

are significant and unmitigable. The applicant states that SCE has the option of re-engineering the project to raise the heights of the structures sufficiently to allow for 40-foot high orchards beneath the transmission lines. This response addresses the applicant's assertion, and evaluates potential environmental impacts resulting from increasing the heights of structures as proposed by SCE.

Background Information

The CPUC's General Order 95 (G.O. 95), Appendix E, dictates the minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts (radial clearances). For 220 kV transmission lines, such as those proposed by the Proposed Project and alternatives, the radial clearance must be a minimum of 10 feet. G.O. 95 states that vegetation management practices may make it advantageous to impose greater clearances than the minimum required. To comply with the Tree Trimming and Vegetation Management requirements as established by the CPUC and the North American Electric Reliability Corporation (NERC), SCE has created supplementary guides and standard practices to assure compliance with regulatory requirements. As a result, SCE has developed the standard vegetation management (tree trimming) guideline of 25 feet plus one year's growth as the minimum clearance distance a tree should be maintained from an energized 220kV conductor. As an alternative to these guidelines and standard practices, SCE provides property owners with the option of maintaining trees at a maximum height of 15 feet from the surface of the ground in order to ensure adequate tree to conductor clearances. This second guideline would be most applicable to the Proposed Project and alternatives, and as such was used for the Draft EIR analysis.

Subsequent to receiving SCE's Comment O24-6, CPUC requested additional information from SCE specifying the structure heights necessary to allow for the continued productive operation of walnut orchards within a 220 kV transmission line ROW. In response to CPUC's request, SCE submitted a letter dated December 11, 2009 outlining two strategies for modifying structure heights to accommodate walnut orchards (SCE, 2009):

Strategy 1 considered increasing the heights of specific poles and towers to varying degrees, to allow for a maximum walnut tree height of 30 feet to be maintained beneath the 220 kV conductor. Approximate structure heights to allow for up to a 30-foot tree would range from 140 to 155 feet.

Strategy 2 considers increasing the structure height of all poles and towers in the vicinity of walnut orchards to 160 feet, the maximum

structure height identified in the Draft EIR, which would allow for maximum tree heights ranging from 38 to 58 feet.

Table 5(RTC)-1 shows the Proposed Project structures that would need to be raised to allow for walnut production for both scenarios, the number of feet the structures would have to be raised, and how the increased structure heights compare to baseline conditions and to the Proposed Project as analyzed in the Draft EIR.

Both of SCE's strategies would allow for walnut orchards to be productively operated and maintained within the Proposed Project ROW (Beede, 2009), and as such both were considered during Final EIR analysis. However, raising structure height would contribute to potential impacts to aesthetics, as higher towers and poles would be more visible to the public than the structures assessed in the Draft EIR (see Section 4.1, *Aesthetics*). SCE's first strategy, raising the structures high enough to allow for 30-foot trees, would increase structure heights less than under the second strategy, while still maintaining orchard production, and would consequently result in less impact to visual resources. As such, the analysis for the Final EIR considers implementation of SCE's Strategy 1.

Final EIR Analysis

Raising the heights of towers and poles to 140 to 155 feet tall would mitigate some previously disclosed impacts discussed in the Draft EIR, but may also increase the severity of previously disclosed impacts. The affected sections include Draft EIR Section 4.1, *Aesthetics*, Section 4.2, *Agricultural Resources*, and Section 4.7, *Hazards and Hazardous Materials*. Each of these sections is reanalyzed, below, for impacts resulting from implementation of SCE's Strategy 1.

Impacts to Agricultural Resources

Proposed Project

Draft EIR Section 4.2, *Agricultural Resources*, Impact 4.2-4, discusses how the Proposed Project would require removal of existing walnut orchards within the proposed ROW (both new and existing), due to the tree height restrictions that would be imposed. Due to the ROW traversing existing orchards, farming of ROW sections presently used for walnuts may be infeasible and therefore could result in the conversion of additional *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* (Farmland) to non-agricultural use. Under Impact 4.2-4, it was presumed that walnut trees in the Proposed Project ROW would not be productively farmed when cropped to 15 feet in the ROW.

**TABLE 5(RTC)-1
STRUCTURE HEIGHT INCREASES TO ALLOW FOR CONTINUED WALNUT ORCHARD PRODUCTION IN NEW ROW FOR THE PROPOSED PROJECT^a**

SJXVL Proposed Project Structure Number	Existing Structure Height (Baseline) (feet)	Structure Type	Proposed Project		Strategy 1: To Allow up to 30-foot Tree			Strategy 2: All Structures 160 feet tall				Sensitive Viewers
			Proposed Structure Height (feet agl ^c)	Height Increase Above Baseline (feet)	Approximate Structure Height (feet agl)	Height Increase Above Proposed Project (feet)	Height Increase Above Baseline (feet)	Maximum Structure Height (feet)	Maximum Height Of Tree in This Span (feet)	Height Increase Above Proposed Project (feet)	Height Increase Above Baseline (feet)	
			Structure #7 ^b	63	Tower	122	59	140	18	77	160	
Structure #8	n/a	Tubular Pole	120	120	145	25	145	160	50	40	160	motorists on SR 198
Structure #9	n/a	Tubular Pole	120	120	140	20	140	160	52	40	160	motorists on SR 198
Structure #10	n/a	Tubular Pole	120	120	150	30	150	160	38	40	160	motorists on SR 198
Structure #11	n/a	Tubular Pole	140	140	155	15	155	160	48	20	160	motorists on SR 198
Structure #12	n/a	Tubular Pole	130	130	140	10	140	160	58	30	160	motorists on SR 198
Structure #13	n/a	Tower	131	131	140	9	140	160	55	29	160	motorists on SR 198
Structure #14	n/a	Tower	131	131	140	9	140	160	53	29	160	motorists on SR 198
Structure #15	n/a	Tubular Pole	130	130	145	15	145	160	45	30	160	motorists on SR 198
Structure #16	n/a	Tubular Pole	130	130	150	20	150	160	43	30	160	motorists on SR 198
Structure #17	n/a	Tubular Pole	120	120	145	25	145	160	49	40	160	motorists on SR 198 and recreational users of Liberty Park
Structure #18	n/a	Tubular Pole	120	120	140	20	140	160	49	40	160	motorists on SR 198 and recreational users of Liberty Park
Structure #19	n/a	Tubular Pole	130	130	150	20	150	160	Currently another crop	30	160	motorists on SR 198 and recreational users of Liberty Park
Structure #22	n/a	Tower	130	130	140	10	140	160	52	30	160	motorists on SR 198
Structure #23	n/a	Tubular Pole	120	120	140	20	140	160	52	40	160	motorists on SR 198
Structure #24	n/a	Tubular Pole	120	120	140	20	140	160	52	40	160	motorists on SR 198
Structure #25	n/a	Tubular Pole	130	130	140	10	140	160	Currently another crop	30	160	motorists on SR 198

For portion of the Proposed Project occurring in existing SCE ROW, the Draft EIR took a conservative approach and assumed that walnut orchards currently growing in the ROW would be impacted by the SCE's tree height restrictions. Since publication of the Draft EIR, further analysis revealed that walnut orchards growing in the existing ROW (for the Proposed Project and all alternatives) are currently pruned according to standard SCE vegetation management practices. This information was confirmed by SCE (SCE, 2009). Figure 5(RTC)-1, taken on October 7, 2009, shows walnut trees growing within existing SCE ROW that are pruned to approximately 15 feet. Adjacent to the pruned orchards are walnut orchards located just outside of the ROW, with trees that are approximately 28 feet tall.

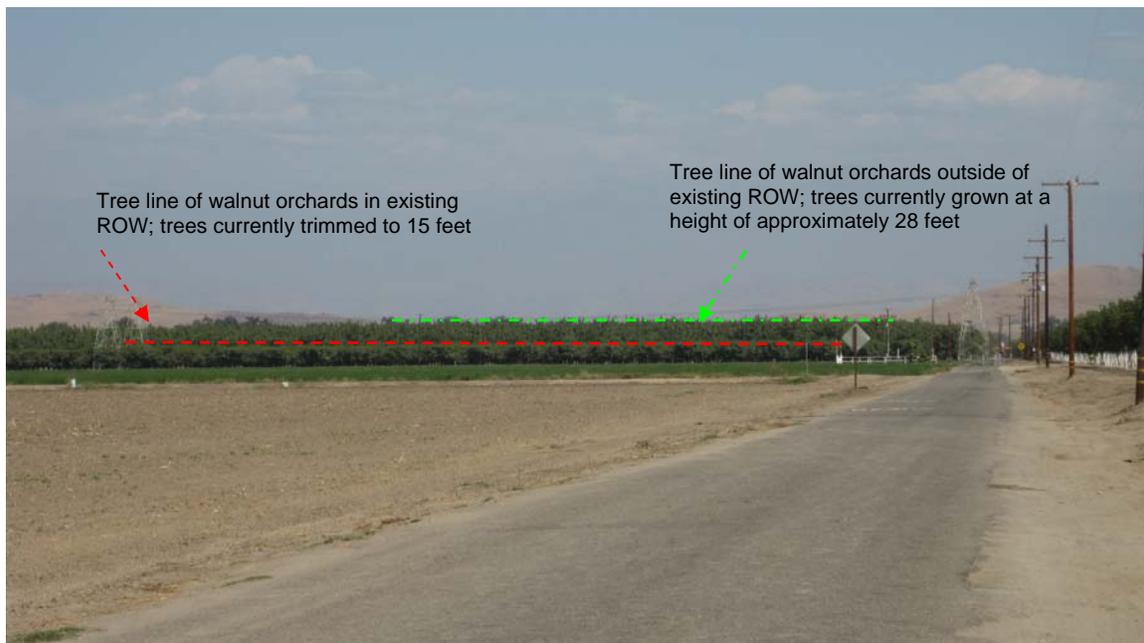


Figure 5(RTC)-1
Existing view of SCE ROW from
Avenue 320 and Road 144 looking west

Consequently, future maintenance and operation of the Proposed Project within existing ROW would not require trees to be trimmed below baseline conditions. Walnut orchards would maintain their existing levels of production, and therefore the Farmland would not be converted to non-agricultural use by the permanent removal of walnut production within the ROW.

For portion of the Proposed Project occurring in new ROW, trimming full grown walnut trees down to 15 feet would render the trees unproductive and result in the removal of walnut orchards, as analyzed in the Draft EIR. According to the Final EIR analysis for impacts to agriculture, the Proposed

Project would cause the permanent removal of 24.4 acres of walnut orchards on Farmland in the new ROW (see Appendix G, which contains the revised Draft EIR Section 4.2, including all text changes to the section).

Therefore, in response to Comment O24-6 and SCE's letter dated December 11, 2009, Draft EIR Section 4.2, Impact 4.2-4 and Mitigation Measure 4.2-4 (page 4.2-16) are revised as follows:

Impact 4.2-4: The Proposed Project could involve removal of orchards which, due to their location or nature, could result in the conversion of additional Farmland to non-agricultural use.

Significant unmitigable (Class I) Less than significant with mitigation (Class II)

...Consequently, the Proposed Project would cause the permanent removal of ~~29~~24.4 acres of walnut orchards located within the ROW. ~~Furthermore, because of the height restrictions, no reclaimed land in the existing ROW could be used for new walnut orchards.~~

Mitigation Measure 4.2-4: ~~Implement Mitigation Measure 4.2-2. Increase the height of Proposed Project structures as shown in Table 4.2-6, to allow for a maximum walnut tree height of 30 feet to be maintained beneath the 220 kV conductor.~~

~~While i~~Implementation of Mitigation Measure 4.2-4 would reduce the ~~acreage of Farmland lost due to walnut orchard loss to zero. impact of the proposed conversion of Farmland to non-agricultural uses~~ However, the pruning of existing walnut trees to 30-feet may reduce these trees' annual yield to varying degrees, depending on the tree species and height in affected orchards (Beede, 2010). This may result in an economic impact to farmers. CEQA Guidelines (15131 [a]) do not directly require an analysis of a project's economic effects because such impacts are not, in and of themselves, considered significant effects on the environment. Nevertheless, as discussed under Impact 4.2-1, the financial-impacts related to loss of agricultural production (i.e., temporary and permanent) would be addressed by SCE during its ROW acquisition process, it would not reduce the impact to a less than significant level. The permanent removal of 29 acres of walnut orchards in designated Farmland would result in the conversion of a significant amount of agricultural land. Therefore, permanent impacts to Farmland would be less than significant unmitigable.

Significance after Mitigation: ~~Significant unmitigable~~ Less than significant.

**TABLE 4.2-6
MITIGATION MEASURE 4.2-4: REQUIRED POLE HEIGHTS FOR STRUCTURES
IN NEW ROW CONTAINING WALNUT ORCHARDS**

<u>SJXVL Structure Number</u>	<u>Structure Type</u>	<u>Approximate Structure Height to Allow up to a 30 Foot Tree</u>
<u>Structure #7^a</u>	<u>Tower</u>	<u>140</u>
<u>Structure #8</u>	<u>Tubular Pole</u>	<u>145</u>
<u>Structure #9</u>	<u>Tubular Pole</u>	<u>140</u>
<u>Structure #10</u>	<u>Tubular Pole</u>	<u>150</u>
<u>Structure #11</u>	<u>Tubular Pole</u>	<u>155</u>
<u>Structure #12</u>	<u>Tubular Pole</u>	<u>140</u>
<u>Structure #13</u>	<u>Tower</u>	<u>140</u>
<u>Structure #14</u>	<u>Tower</u>	<u>140</u>
<u>Structure #15</u>	<u>Tubular Pole</u>	<u>145</u>
<u>Structure #16</u>	<u>Tubular Pole</u>	<u>150</u>
<u>Structure #17</u>	<u>Tubular Pole</u>	<u>145</u>
<u>Structure #18</u>	<u>Tubular Pole</u>	<u>140</u>
<u>Structure #19</u>	<u>Tubular Pole</u>	<u>150</u>
<u>Structure #22</u>	<u>Tower</u>	<u>140</u>
<u>Structure #23</u>	<u>Tubular Pole</u>	<u>140</u>
<u>Structure #24</u>	<u>Tubular Pole</u>	<u>140</u>
<u>Structure #25</u>	<u>Tubular Pole</u>	<u>140</u>

^a 'Structure #7' consists of both the replacement tower structure and the new tower structure at the 'Structure #7' location depicted on page 2-7.

SOURCE: SCE, 2009

The following references have been added to Draft EIR Section 4.2, *Agricultural Resources*:

Beede, 2010. Robert Beede, Farm Advisor, Kings County University of California Cooperative Extension. Personal communication January 4, 2010.

SCE, 2009. Letter from Southern California Edison Company to CPUC: San Joaquin Cross Valley Loop Transmission Project, 220 kV Transmission Right-of-Way and Walnut Trees. December 11, 2009.

Alternatives 2, 3 and 6

For Alternatives 2, 3 and 6, all walnut orchards traversed by the alternatives are located in existing SCE ROW. Therefore, as explained above, construction and operation of all alternatives would maintain current walnut tree trimming and cultivation practices, and therefore no Farmland would be

converted to non-agricultural use. The analysis for all project alternatives has been updated to reflect this change. For Alternative 2, the analysis for Impact (c) (Draft EIR page 4.2-19) has been changed to read:

Similar to the Proposed Project, Alternative 2 would not result in further urbanization of the area or make agricultural land vulnerable to the pressures of urbanization. However, unlike the Proposed Project, Alternative 2 would not lead to the additional loss of designated Farmland and non-designated farmland to non-agricultural uses, due to permanent removal of walnut orchards under the ROW. Alternative 2 would cross existing walnuts orchards located between proposed Poles #5 through #9, and #25 through #28, within existing SCE ROW. However, the orchards growing in the ROW are currently maintained at 15 feet, in accordance with SCE standard vegetation management guidelines. Therefore, maintenance and operation of Alternative 2 would sustain orchards at existing levels of production, and would not result in the permanent removal of walnut orchards in the ROW. Impacts to Farmland would be less than significant (Class III).

~~Approximately 12 acres of walnut orchards are located within the existing SCE ROW associated with Alternative 2 which is 17 acres less than the Proposed Project. Alternative 2 would permanently remove these walnut orchards from production. As with the Proposed Project, farmers may or may not replant an alternative crop within the ROW, which could lead to formerly productive agricultural land becoming permanently unusable. While implementation of Mitigation Measure 4.2-4 would reduce the impact of the proposed conversion of Farmland to non-agricultural uses, it would not be reduced to a less than significant level. The permanent removal of 12 acres of walnut orchards would result in the conversion of Farmland. Therefore, permanent impacts to Farmland would be significant unmitigable (Class I).~~

~~Also s~~Similar to the Proposed Project...

The analysis for Alternatives 3 and 6 is identical to Alternative 2 (see Appendix G).

Summary of Impacts to Agricultural Resources

The use of taller poles and towers for the Proposed Project would remove impacts to walnuts from vegetation management practices in new ROW, and thereby reduce the acres of Farmland converted to non-agricultural use for the Proposed Project. However, such a reduction would not change the conclusion of the Draft EIR related to the ranking of the alternatives. Alternative 3 would continue to result in the least impact on agricultural

resources with a permanent disturbance of 18.2 acres, followed by Alternative 2 with a permanent disturbance of 25.6 acres. Alternative 6 would permanently disturb approximately 31.6 acres, and the Preferred Project would continue to have the most impacts on agriculture, permanently disturbing 31.9 acres. Consequently, raising the poles and towers would not alter the Draft EIR's conclusion that Alternative 3 is the preferred alternative with respect to agricultural resource impacts.

For consistency in the Final EIR document, the conclusions reached in this analysis also require text changes to the Draft EIR *Executive Summary*; Chapter 5, *Comparison of Alternatives*; and Chapter 8, *Mitigation Monitoring, Reporting and Compliance Program* (MMRCP). See Final EIR Chapter 8 for text changes made to the Draft EIR *Executive Summary* and Chapter 5. The Final EIR MMRCP for the Environmentally Superior Alternative (Alternative 2), including relevant text changes, is located in Appendix H of the Final EIR document.

Impacts to Aesthetics

Proposed Project

The aesthetic impacts from raising the height of poles and towers would be directly correlated with how tall the new structures would be. As shown in Table 4.2-6, above, poles and towers would increase between nine and 30 feet above levels analyzed in the Draft EIR for the Proposed Project. This represents an incremental to moderate increase in the height of the structures than those analyzed in the Draft EIR.

For the Proposed Project, implementation of Mitigation Measure 4.2-4 would result in an increase in the heights of Structures #7 through #19 and Structures #22 through #25. Structure #7 is located within SCE's existing 150-foot transmission ROW, and would replace a set of existing lattice steel towers that are approximately 63 feet tall. Viewers primarily affected in the vicinity of Structure #7 would be local roadway motorists and nearby residents. Residents include the occupants of the approximately 20 residential properties located within 300 feet of Structure #7, plus additional residents in the adjacent residential developments that would have views of the transmission structures. The area is representative/indistinct, as the ROW contains land used for agriculture as well as SCE's existing transmission line. The existing transmission line consists of two sets of 63-foot tall single circuit 220 kV lattice towers. In conjunction with the low number of viewers, extended view duration, and the representative/indistinct nature of the site, visual sensitivity of the site would be considered low-moderate.

To permit future walnut orchard production within the new ROW, the height of Structure #7 would need to be raised to 122 feet, which is 18 feet higher than what was analyzed in the Draft EIR. Figures 4.1-4a and 4.1-4b in the Draft EIR show “before” and “after” views of the existing structures and the Proposed Project’s Structure #7. The views show the existing and new towers as seen looking northeast from a representative residential and roadway view on South Rio Linda Street in the Los Rios residential subdivision at the eastern edge of the City of Visalia. With implementation of Mitigation Measure 4.2-4, the height of Structure #7 would increase 77 feet above baseline conditions. In Figure 4.1-4b, the visual representation of the height of the towers would increase approximately 3/10 of an inch. Seen in the context of the existing facilities, a 77-foot increase above baseline conditions would more than double the structure height, and would represent a moderate-high increase in profile and volume. The new height would place the towers and conductors above the roof-line, and from a few vantage points, above the tree-line. The new lattice towers would result in a moderate visual contrast, as the towers would begin to attract attention and begin to dominate the characteristic landscape. As such, the overall visual change from baseline conditions would be moderate-high. However, given the low-moderate visual sensitivity of the location, impacts at Structure #7 would be adverse but less than significant.

Structures #8 through #19 and #22 through #25 would consist of 14 new poles and two new towers, all in the new 100-foot ROW. As shown in Table 4.2-6 above, structure heights would increase between nine and 30 feet compared to the Proposed Project, resulting in pole and tower heights of 140 to 155 feet. These structures would be located approximately 0.45 miles south of SR 198 which is an eligible State scenic highway. In this area of the Proposed Project, the primary viewers would be motorists along SR 198. Views from SR 198 would range from partially to fully screened by existing vegetation, structures, and utility infrastructure. Assuming a traffic speed of 65 miles per hour, the approximately 3.0 mile segment of taller poles and towers that would parallel SR 198 would be visible from SR 198 for approximately 2 minutes and 45 seconds. The taller towers would contrast with the agricultural character of the viewshed; however the degree of contrast would be weak-moderate, as the poles would be viewed from a distance of almost half a mile and would not overly attract attention or dominate the character of the landscape. The visual impact therefore would be less than significant.

Structures #8 through #19 and #22 through #25 would also be visible to a limited number of small, local roadways and residences, and Structures #17 through #19 would be visible to visitors to Liberty Park in the City of Farmersville. For local residences, although the Proposed Project would be

visually prominent above the existing walnut orchards, it would represent a moderate visual change to a landscape setting in which existing utility poles currently appear. Visual impacts to local roadways and private residences in this section of the Proposed Project would be less than significant and require no mitigation. As discussed in Response O10-1, recreational users of Liberty Park would have limited views of the Proposed Project from a distance of approximately 0.4 miles. Views would range from partially to fully obscured by trees and structures. Implementation of the Proposed Project would result in a moderate visual contrast, and the new transmission facilities would be co-dominant with other industrial structures visible from the park, including propane tanks and Cemex facilities.

The overall visual change would be low to moderate. The visual sensitivity of the park is a function of its visual quality, viewer types and volumes, and viewer exposure. The visual quality of Liberty Park is representative of a local community park, with lawn, planted trees, and park facilities including picnic tables and a paved jogging track. Viewers would consist of park visitors. Although average daily numbers are unavailable, park representatives indicate that there are consistently between 5 and 20 visitors at the park at any given moment throughout the day, with much higher numbers on the weekends and during the summer (Martinez, 2009). Liberty Park is one of the City's most used parks and given the small size of the Farmersville community, by local standards the number of visitors would consequently be considered moderate-high. View duration would be low-moderate, as visitors to the park would see the poles from a distance of approximately 0.4 miles, and views would be partially screened by trees and industrial structures. As such, overall visual sensitivity of Liberty Park would be moderate-high. However, since the Proposed Project would result in a low to moderate visual change, in conjunction with its moderate-high visual sensitivity, the visual impact would be adverse but not significant.

Alternatives 2, 3 and 6

For all of the project alternatives, pole heights would not increase above levels analyzed in the Draft EIR, as discussed above under Agricultural Resources. Therefore, impacts to visual resources from construction, operation, and maintenance of the proposed alternatives remain the same as analyzed in the Draft EIR, Section 4.1, *Aesthetics*, and would be less than significant with mitigation.

Impacts to Hazards and Hazardous Materials

Proposed Project

Impact 4.7-6 addresses potential safety hazards to aerial spray applicators and frost control helicopter pilots due to the proposed new and modified

transmission lines. Based on SCE's comment, it is assumed that the height of the transmission line would only be raised in certain locations where walnut orchards currently exist. Therefore, the transmission lines would create vertical angles where conductor transitions from shorter to taller poles, and taller to shorter poles. Such vertical angles in the transmission line corridors would present a more hazardous condition for aerial applicator and frost control pilots compared to the Proposed Project as analyzed in the Draft EIR, which would have little vertical height variation along the corridors. Although taller pole segments would create vertical angles in the transmission line that would in turn increase the severity of potential hazards to aerial spray applicators and frost control helicopter pilots, the impact would continue to be mitigable to a level that would be less than significant with implementation of Mitigation Measure 4.7-6.

Alternatives 2, 3 and 6

As discussed above, for all of the project alternatives, pole heights would not increase above levels analyzed in the Draft EIR. Therefore, impacts from all alternatives relating to hazards and hazardous materials would remain the same as analyzed in the Draft EIR, Section 4.7, and would be less than significant with mitigation.

Response O24-7 The Applicant notes a typographical error in Chapter 2, *Project Description*. The text of the Draft EIR (page 2-20, Section 2.5.3, Poles and Towers, first paragraph) has been corrected as follows:

In areas along the Proposed Project alignment where extra structural~~ing~~ strength would be required...

Response O24-8 The Applicant provides clarification regarding final engineering of transmission structures. In response to the comment, the following language has been added as a note under Table 2-2 of the Draft EIR (page 2-20, Section 2.5.3):

The exact number, type, configuration, and height of the structures are subject to final engineering.

Response O24-9 The Applicant suggests that the Draft EIR presupposes that SCE will be required to condemn the 2,800 square foot residence that would need to be removed for the Proposed Project. The applicant prefers the word "acquisition." The Draft EIR text (page 2-22, Section 2.6, Rights-of-Way Requirements) has been revised as follows:

Approximately 211 acres of the new ROW would be acquired for the transmission line, including acquisition or condemnation of a 2,800 square foot residence located within the ROW to be acquired.

Response O24-10 The Applicant requests a clarification in Chapter 2, *Project Description* Section 2.6, Right-of-Way Requirements. In response to the comment, the Draft EIR text on page 2-22 has been altered as follows:

These roads would require the acquisition of approximately 2.1 acres of new access road easements.~~ROW~~.

Response O24-11 The Applicant requests a clarification in Chapter 2, *Project Description*. In response to the comment, the Draft EIR text (page 2-24, top paragraph) has been modified as follows:

...private ~~ranching~~ roads would be used to the maximum extent feasible.

Response O24-12 The Applicant provides clarification regarding final engineering of transmission structures. In response to the comment, the following language has been added as a note under Table 2-4 of the Draft EIR (page 2-26, Foundations section):

The exact number, type, configuration, and height of the structures are subject to final engineering.

Response O24-13 The Applicant provides an updated reference to the IEEE standards. In response to the comment, the Draft EIR (page 2-29, Conductor Shield Wire Stringing section, first sentence) has been updated as follows:

IEEE Standard ~~534-1992-524-2003~~

Response O24-14 The Applicant states that a SWPPP would be in place prior to the start of construction. In response to the comment, the text of the Draft EIR (page 2-33, Stormwater Pollution and Prevention) has been clarified as follows:

A Stormwater Pollution and Prevention Plan would be prepared for the Proposed Project, prior to commencement of construction, to provide detail of the locations that hazardous materials may be stored during construction...

Response O24-15 The Applicant states that Table 2-8 on page 2-39 of the Draft EIR misattributes the information in the third column to SCE and incorrectly indicates that construction would be complete by November 2013. In response to the comment, the Draft EIR text (page 2-39, Table 2-8) has been revised as follows:

**TABLE 2-8
PROPOSED CONSTRUCTION TIMETABLE**

Proposed Project Component	Duration (months)	Estimated Schedule
Material Staging Yard preparation	Less than 1	October 2012 <u>September 2011</u>
ROW clearing, access road and structure pad construction	3	October—December 2012 <u>September—November 2011</u>
Demolition of 1.1 miles of existing Big Creek 3 – Rector 220 kV transmission facilities	1	October 2012 <u>September 2011</u>
Construction of 1.1 miles of new Big Creek 1-Rector and Big Creek 3 – Rector 220 kV double circuit transmission line	2	November—December 2012 <u>October—November 2011</u>
Demolition of 1.1 miles of existing Big Creek 1-Rector 220 kV transmission facilities	1	January 2013 <u>December 2011</u>
Construction of 18.5 miles of new 220 kV double circuit transmission line	10	January—October 2013 <u>December 2011—September 2012</u>
Post construction clean-up and restoration	1	November 2013 <u>October 2012</u>

SOURCE: SCE, 2008b; SCE, 2009a.

The following reference is added to the References list at the end of Section 2, *Project Description*:

SCE, 2009a. Comment Letter on Draft EIR. July 31, 2009.

Response O24-16 The commenter identifies a typographical error in Chapter 2, *Project Description*. In response to the comment, the Draft EIR (page 2-40, Section 2.8.1, 220 kV Transmission Line, first paragraph) has been corrected as follows:

This involves both routine ~~g~~ preventative maintenance...

Response O24-17 The commenter requests clarification to Chapter 2, *Project Description*. In response to the comment, the Draft EIR text (page 2-40, Section 2.8.1, 220 kV Transmission Line, third paragraph) has been revised as follows:

Maintenance of the transmission facilities would include limitations on certain land uses that may restrict SCE's ability to have unrestricted 24/7 access to the ROW and its transmission facilities, and property owner maintenance of vegetation height within the ROW. After review and approval by SCE, Land uses that would typically be permitted within the ROW after project completion include agricultural and landscaping, underground facilities, biking and hiking trails, and automotive vehicle parking. ~~Specific requirements~~ SCE's guidelines associated with these activities include:

Response O24-18 Refer to Response 024-3 and Master Response 4.3 on EMF.

Response O24-19 The last sentence of the second paragraph in Draft EIR Section 2.9.1 has been modified as follows to indicate the correct appendix letter.

Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix ~~D~~ B.

Response O24-20 The first sentence of the second paragraph in Draft EIR Section 2.9.1 has been modified as follows to include a more accurate description of electric fields.

Potential health effects from exposure to *electric fields* from transmission lines (i.e., the ~~effect force field~~ produced by the existence of an electric charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) have not been established. ~~typically~~ Electric fields are generally not thought of as a concern ~~do not present a human health risk~~ since electric fields are effectively shielded by materials such as trees, walls, etc.

Response O24-21 The Applicant identified typographical errors in two CEQA citations in the Draft EIR. On page 3-2, the third paragraph, the text is corrected to read:

CEQA Guidelines (Section 15126.2(a))...

On page 3-2, the fifth paragraph, the text is corrected to read:

(Section 165126.6(b))

Response O24-22 The Applicant requests a change to Table 3-1 on page 3-6 of the Draft EIR because appropriate vernal pool habitat is not present in the Proposed Project alignment. However, the table is correct as-is. As noted in the title of the table, it provides a list of preliminary significant environmental impacts that were identified early in the EIR process for use in identifying and screening potential project alternatives. As noted on page 3-5 of the Draft EIR, “[t]he impacts in the Table 3-1 are representative of those resulting from preliminary EIR preparation and were therefore used to determine whether an alternative met CEQA Guidelines Section 16126.6(a) requirements.” At that early stage in the analysis, the presence or absence of vernal pool habitat in the Proposed Project alignment had not been determined, so, given the fact that vernal pool habitat was known to exist generally in the project area, it was reasonable to consider it as a potential environmental impact for the purposes of alternatives screening. The actual impacts of the Proposed Project and alternatives, as determined by the complete environmental analysis, are described in Tables 5-1 and 5-2 of the Draft EIR.

- Response O24-23 See Response O24-22.
- Response O24-24 See Response O24-22.
- Response O24-25 See Response O24-22.
- Response O24-26 The Applicant notes that Table 3-2 of the Draft EIR states that Alternative 2 would avoid the communities of Farmersville and Lemon Cove, but does not state that Alternative 2 would not avoid the community of Elderwood. Table 3-2 is simply a summary of why an alternative either passed or did not pass screening for consideration in the full environmental analysis. Alternative 2's proximity to Elderwood is clearly reflected on the road story maps included as Appendix C of the Draft EIR.
- Response O24-27 Applicant states that Table 3-2 on page 3-7 should change the comparison to be based on circuit miles (length of new transmission line circuits) rather than on corridor miles (length of the corridor). However, for consistency in comparing alternatives, this table lists the corridor length for each alternative, as this metric has been used in all previous CEQA public outreach materials. The effect of circuit miles is accounted for in the construction timetable which is included in the description of each alternative (page 3-12 for Alternative 2, page 3-15 for Alternative 3, and page 3-18 for Alternative 6).
- Response O24-28 Referencing Draft EIR page 3-8, the Applicant states that based on their project objectives, acquiring permits to reconductor and/or replace structures may not be possible within the timeframe needed to serve electrical service reliability. The Applicant's complete list of project objectives were distilled down to two "basic project objectives" as described on pages 3-2 through 3-4 of the Draft EIR for the purpose of screening alternatives. The Applicant's construction schedule requirements were not considered "basic project objectives" for the CEQA analysis, but may be considered by the CPUC in the CPCN process.
- Response O24-29 Referencing Draft EIR page 3-10, the Applicant claims that the section "Alternatives Evaluated in the EIR" fails to compare each alternative to the basic objectives of the project as defined by the Applicant. CEQA Guidelines require the consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives" (Section 15126.6(b)). Therefore, it is not required that each alternative meet all of the project objectives. The Applicant's complete list of project objectives were distilled down to two "basic project objectives" as described on pages 3-2 through 3-4 of the Draft EIR for the purpose of screening alternatives. The Applicant's construction schedule requirements were not considered "basic project objectives" for the CEQA analysis, but may be considered by the CPUC in the CPCN process.

Response O24-30 The Applicant states that work areas outside the ROW may be required, and is unknown at this time. The text on Draft EIR page 3-11, 1st paragraph, is clarified to read:

Work areas (i.e., tensioning, stringing, and pulling sites) ~~would~~ may be required outside of the ROW . . .

Response O24-31 Referencing Draft EIR page 3-12, the Applicant states that they may need to take steps to accelerate field construction activities in order to meet the October 2012 operating date. Comment noted.

Response O24-32 The Applicant notes that on page 3-13, the Draft EIR states that Alternative 2 would result in "...permanent removal of fewer acres of Farmland than the Proposed Project." The Applicant states that Alternative 2 would cross approximately 17.5 more acres of Farmland than the Proposed Project. However, simply crossing Farmland would not create an impact, as, for the most part (walnuts excepted), existing crops would be allowed to remain in the ROW. The Draft EIR analysis is based (in pertinent part) on the acreage of Farmland that would be permanently taken out of production, not simply crossed. So the comparison and conclusion on page 3-13 is correct.

Response O24-33 The Applicant claims that permanently removing fewer acres of walnut orchards from production is not a CEQA criterion. The Applicant is referred to criterion c) on page 4.2-9, which says "[i]nvolve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use." Using this criterion, the Draft EIR analysis on page 4.2-15 finds that the removal of walnut trees in the ROW would have the effect of rendering formerly productive Farmland unusable. (See also Response O24-2, above, for documentation as to why a different crop cannot simply replace the lost strip of walnut trees.) See Response O24-6 for new mitigation requiring taller pole and tower structures in new ROW containing walnut orchards, which would reduce impacts to walnut orchards to less than significant.

Response O24-34 The Applicant states that work areas outside the ROW may be required, and is unknown at this time. The text on Draft EIR page 3-14, 1st paragraph, is clarified to read:

Work areas (i.e., tensioning, stringing, and pulling sites) ~~would~~ may be required outside of the ROW . . .

Response O24-35 Referencing Draft EIR page 3-15, the Applicant states that they may need to take steps to accelerate field construction activities in order to meet the October 2012 operating date. Comment noted.

- Response O24-36 See Response O24-33.
- Response O24-37 The applicant provides clarification regarding final engineering of transmission structures for Alternative 6. In response to the comment, the following language has been added as a note under Tables 3-9 and 3-10 of the Draft EIR (page 3-17, Section 3.4.3):
- The exact number, type, configuration, and height of the structures are subject to final engineering.
- Response O24-38 See Response O24-37.
- Response O24-39 See Response O24-33.
- Response O24-40 The Applicant questions the necessity of evaluating visual impacts to Kaweah Oaks Preserve and Cutler Park visitors due to the very limited views of the Proposed Project and Alternatives. The Draft EIR states on page 4.1-19 that “as depicted in Figure 4.1-2e (Photos 19 and 20), recreational viewers, including hikers using trails that traverse the [Kaweah Oaks] Preserve, would have limited views of the Proposed Project alignment due to intervening park vegetation, including a grove of mature trees located between the Preserve entrance and SR 198.” The Draft EIR also states on page 4.1-20, Table 4.1-2, that both Kaweah Oaks Preserve and Cutler Park have a low number of viewers. This low viewership contributes to the Draft EIR’s determination that both parks have low visual sensitivity. Therefore, the EIR is consistent with the Applicant’s comment.
- Response O24-41 The Applicant restates Comment 024-40. See Response 024-40.
- Response O24-42 The Applicant recommends clarification on the visibility of Alternative 6 from Cutler Park. In response to this comment, the following text from the Draft EIR (Section 4.1, *Aesthetics*, pg. 4.1-19) has been updated as follows:
- “Cutler Park, a 50-acre property, is located approximately two miles north of the Proposed Project and approximately one-quarter mile east of Alternatives 2 ~~and 3~~, 3, and 6 near the community of Ivanhoe. Attendance is generally highest during the summer when there is flow in the river, as locals use the park for swimming, inner-tubing and wading. Recreational users would have no views of the Proposed Project. Views of Alternatives 2 ~~and 3~~, 3, and 6 alignments would generally be obstructed by vegetation and terrain. Despite the moderate number of views, viewer exposure would be considered low due to the limited visibility and low view duration.”

Response O24-43 The Applicant recommends clarification that the Proposed Project traverses a single parcel zoned *SC*. In response to this comment, the text of the Draft EIR (Section 4.9, *Land Use, Planning, and Policies*, pg. 4.9-6) has been modified as follows:

The Proposed Project would traverse parcels with *Exclusive Agricultural (AE-20 and AE-40)*, *Foothill Agricultural (AF)*, *Agricultural (A-1)*, *Planned Development (PD)*, ~~*Scenic Corridor Combining (SC)*~~, *Special Mobile Home (M)*, and *Service Commercial (C-3)* zoning designations, and one parcel zoned *Scenic Corridor Combining (SC)*.

For consistency, additional text from the Draft EIR (Section 4.9, *Land Use, Planning, and Policies*, pg. 4.9-15) has been modified as follows:

Tulare County Zoning Ordinance. The Proposed Project would traverse parcels zoned by the Tulare County Zoning Ordinance as *AE-20 and AE-40, AF, A-1, PD, ~~SC~~, M, and C-3*, and one parcel zoned *SC* (Tulare County, 1999).

Response O24-44 The Applicant restates Comment 024-8. See Response 024-8.

Response O24-45 The Applicant expresses the opinion that Mitigation Measure 4.1-1a (Section 4.1, *Aesthetics*, page 4.1-40) should not pertain to Impact 4.1-1 (substantially damaging a scenic resource within a scenic highway), and should instead pertain to Impact 4.1-2 (substantially degrading the existing visual character or quality of the site and its surroundings). As described on page 4.1-39 of the Draft EIR, the proposed new structures would cause a noticeable increase in structure prominence and industrial character within the landscape, as viewed from portions of SR 198. Since SR 198 is a frequently used eligible State scenic route, the resulting visual impact would be potentially significant. Mitigation Measure 4.1-1a would reduce impacts from the Proposed Project to an eligible State scenic highway. Therefore, Mitigation Measure 4.1-1a is applied appropriately.

Response O24-46 The Applicant states that the requirements imposed by Mitigation Measure 4.1-1a (Treat Surfaces with Appropriate Colors, Finishes, and Textures) would prevent SCE from meeting its project scheduling objective, because tubular steel pole transmission structures are long lead procurement items. The Applicant states that there will be no opportunity to modify factory applied surface coatings (i.e., dull grey galvanized finish) without significant delay to the project construction schedule and at significant costs. CEQA requires that mitigation measures be feasible procedures which could minimize significant adverse impacts, that there is an essential nexus (i.e., connection) between the mitigation measures and a legitimate governmental interest, and that the mitigation measures be “roughly proportional” to the

impacts of the project (CEQA Guidelines Section 15126.4). Mitigation Measure 4.1-1a is consistent with these criteria, and is necessary to reduce the impacts of the Proposed Project and alternatives to less than significant. Consequently, Mitigation Measure 4.1-1a is essential to the CEQA analysis and will not be modified. The Applicant's concern with the potential cost and schedule effects of Mitigation Measure 4.1-1a are noted, but do not render the mitigation infeasible. Cost and schedule issues may be considered separately by the CPUC in its CPCN process.

The Applicant is concerned that the term "review and approval" is undefined in Mitigation Measure 4.1-1a, and is concerned that the mitigation measure does not provide objective review criteria for streamlined implementation. The Applicant states that leaving review and approval to a third party may result in delays to the project engineering, procurement, and construction schedule. According to Mitigation Measure 4.1-1a, SCE is required to develop a SCE Structure Surface Treatment Plan in consultation with a visual specialist designated by the CPUC. The presence of a third party visual specialist is critical to ensuring that the objectives of the Mitigation Measure are achieved. Since the visual specialist would participate in the plan's development it is unlikely that review and approval of the plan by the CPUC will result in significant project delays.

The Applicant also states that they will utilize surface structure treatments consistent with those identified in the PEA description, and will provide CPUC notice if any deviation from that description is necessary for any particular structures. If SCE does not apply surface treatments consistent with those outlined in Mitigation Measure 4.1-1a for those structures identified in the mitigation, and does not have a Structure Surface Treatment Plan reviewed and approved by the CPUC at least 90 days prior to construction, the terms of the mitigation will not be met. In such a case, the CPUC has the legal authority to stop work until compliance is met.

Response O24-47 The Applicant requests that Mitigation Measure 4.1-2 be clarified to include only temporary staging areas, and questions the need for mitigation in circumstances where the visual impact is expected to be minimal or non-existent. Although the two staging areas would only be used on a temporary basis, adverse visual impacts associated with operation of these temporary sites could occur during the approximately 9 to 12-month construction period, as described in Draft EIR Section 4.1, *Aesthetics*. Mitigation Measures 4.1-2 (page 4.1-41) requires the use of an appropriate, non-reflective material for the fencing surrounding the staging areas only "if visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails." The extent of the visual mitigation and screening measures is proportional to the assessed impact. In addition, the mitigation does not require vinyl slats, and merely suggests this type of screening as an

option. Therefore, there is an essential nexus between the impact and the proposed mitigation measure.

In response to the comment requesting Mitigation Measure 4.1-2 to be clarified to reflect that it should be clearly limited to providing documentation of any plans for the location and general construction of temporary staging areas and that it does not apply to individual pole or tower locations, the following text from the Draft EIR (Section 4.1-1, *Aesthetics*, page 4.1-41) has been clarified as follows:

Mitigation Measure 4.1-2: Reduce visibility of staging areas. All staging areas including storage sites for excavated materials, and helicopter fly yards, shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, construction sites and staging areas and fly yards, not including construction areas around structure sites, shall be visually screened using temporary screening fencing. Fencing shall incorporate aesthetic treatment through use of appropriate, non-reflective materials, such as chain link fence with light brown vinyl slats. SCE shall submit final construction plans of the staging areas demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

The Applicant also states that Mitigation Measure 4.1-2 does not define what would constitute a staging area as being “appropriately located away from areas of high public visibility.” In fact, the second sentence in the mitigation measure defines areas of high public visibility as “nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails...”

Response O24-48 The Applicant requests that Mitigation Measure 4.1-3 be modified to allow SCE to request additional time to place equipment on the pulling/splicing sites beyond the two weeks prior to required use. Permitting SCE to park their equipment on site for extended periods in advance of the start of construction would result in additional and avoidable visual impacts in visually sensitive areas. Therefore, in general, construction equipment should not be delivered on site until two weeks before construction is scheduled and anticipated to begin. Nevertheless, it is acknowledged that circumstances may occur in which new unforeseen and site-specific circumstances warrant that SCE to keep the equipment on-site for additional time (e.g. such as if an environmental mitigation issue arises that delays construction activities after equipment has been brought to the site). Mitigation Measure 4.1-3 does not preclude SCE from keeping equipment on the pulling/splicing sites during such circumstances that warrant additional time, as long as the equipment was brought to the site during the two-weeks prior to the original anticipated construction date.

Response O24-49 The Applicant expresses the opinion that Mitigation Measure 4.1-6 incorrectly assumes that SCE would be constructing a new substation-type project at one discrete fixed location. The Applicant states that if construction lighting were necessary at any location, the use of such lighting would only be used as necessary during construction of the structures at that location. The Applicant requests that this mitigation measure be eliminated as inapplicable or re-drafted to indicate that SCE can instead provide the CPUC with a single project wide construction plan that would apply to all storage yards and potential tower construction sites.

In response, the comment mischaracterizes Mitigation Measure 4.1-6. The Mitigation Measure does not assume that SCE would be constructing a new substation-type project at one discrete fixed location. As clearly stated in Mitigation Measure 4.1-6, the requirement of a Construction Lighting Mitigation Plan would apply to all project facilities, including construction and storage yards and staging areas. As described in Section 4.1, *Aesthetics* on page 4.1-50, a large portion of the Proposed Project would be located in relatively undeveloped areas with features that, when illuminated, would result in increased lighting contrast. Therefore, the requirement of a Construction Lighting Mitigation Plan is considered necessary to reduce the potential impacts from construction night lighting since even though temporary, without implementation of Mitigation Measure 4.1-6, there would otherwise be a significant adverse visual impact.

Response O24-50 The Applicant restates their comment 024-8. See Response 024-8.

Response O24-51 The Applicant comments that wind machines are agricultural infrastructure. In response to this comment, the following text from the Draft EIR (pg. 4.1-47, first paragraph) has been clarified as follows:

“However, the new transmission line would appear taller and more prominent than existing utility and agricultural infrastructure.”

Response O24-52 The Applicant restates their comment 024-8. See Response 024-8.

Response O24-53 The Applicant disagrees with the Draft EIR’s finding that the Proposed Project would be visible from SR 245 for several miles, and expresses the opinion that the analysis should use views within a quarter mile or one-half mile when determining visual impacts (page 4.1-54). As described in Draft EIR Section 4.1, *Aesthetics* (page 4.1-17, first paragraph), viewing distances are described according to whether the project activities would be viewed within a foreground (within one-half mile or 2,640 feet), middle ground (one-half mile to two miles), or background (beyond two miles) zone. The Proposed Project would be visible to motorists traveling on SR 245 in the foreground for approximately one-half mile and middle ground for approximately 2.5 miles.

Response O24-54 The Applicant would like the first bullet of Mitigation Measure 4.2-1a eliminated, as the replacement of soils may be different than that specified in that mitigation measure. In response to the Applicant's request, the following text from the Draft EIR (page 4.2-11, Mitigation Measure 4.2-1a, first bullet) has been updated as follows:

Replace soils in a manner that shall minimize any negative impacts on crop productivity. The surface and subsurface layers shall be stockpiled separately and returned to their appropriate locations in the soil profile; alternately, SCE may work with individual property owners to develop a different method for the disposition of any soils that are impacted on private property, assuming a mutual agreement may be reached.

The Applicant also takes issue with the second bullet under Mitigation Measure 4.2-1a (page 4.2-11), since compaction of soils may lead to unacceptable conditions for installation of tower foundations. To accommodate engineering requirements, the following text from the Draft EIR (page 4.2-11, Mitigation Measure 4.2-1a, second bullet) has been revised as follows:

To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top three feet) to within five percent of original density, except where higher soil density is necessary to meet engineering requirements for tower foundations within the tower buffer zone.

Response O24-55 The Applicant requests that Mitigation Measure 4.2-1a, fourth bullet, be removed. This portion of Mitigation Measure 4.2-1a requires that SCE avoid working or traveling on wet soil, to minimize compaction and loss of soil structures. It is understood that, to comply Mitigation Measure 4.3-1b (Section 4.3, *Air Quality*) in some circumstances SCE would have to work and travel on wet soil to minimize construction dust on crops. Consequently, Mitigation Measure 4.2-1a does not entirely prohibit SCE from working on wet surfaces but rather directs SCE to avoid working on such surfaces when possible. Mitigation Measure 4.2-1a primarily applies to those circumstances (such as after heavy rains) when working or traveling on wet soil could result in unnecessary soil compaction and loss of soil structure.

Response O24-56 The Applicant clarifies that SCE's clearance requirements around poles and towers are 50 feet for suspension structures (poles), and 100 feet for dead-end structures (towers) within the ROW.

In the Draft EIR, Section 4.2, *Agricultural Resources*, analysts assumed a 50-foot maintenance buffer around both poles and towers. Given SCE's

clarification, all calculations in Section 4.2 have been recalculated to account for 100-foot maintenance buffers surrounding towers. A revised Section 4.2 is included as Appendix G. These recalculations do not alter the order of the preferred alternatives with respect to impacts to agricultural resources: Alternative 3 continues to have the least impacts on agriculture, followed by Alternative 2, Alternative 6, and the Proposed Project (see Appendix G).

All references to numbers from Section 4.2 have been updated in the Final EIR, including references made in the *Executive Summary*; in Section 4.5, *Cultural Resources*; and in Chapter 5, *Comparison of Alternatives*. While updating the *Executive Summary* and Chapter 5, it was noted that, for the Proposed Project, total acreages of *Farmland of Statewide Importance* and *Unique Farmland* had been reversed in several locations in the Draft EIR, including Table ES-2, Table 5-1, Table 5-2, and within the text on page 5-2. Acreages of *Farmland of Statewide Importance* and *Unique Farmland* had also been reversed for Alternatives 2 and 3, in the same locations. These reversals have been corrected, and the Draft EIR has been revised to reflect the updated calculations. The following changes have been made to the Draft EIR (changes also include updates per Response O24-6):

Executive Summary, page ES-14, Table ES-2 is revised as shown on the following page.

Executive Summary, page ES-15, second and third paragraphs:

However, impacts to agricultural resources do vary enough to determine a preferred alternative from an agricultural resources perspective. While impacts on agricultural resources would remain significant and unmitigable, Alternative 3 would be preferred as it would impact only ~~16,718.2~~ 18.2 acres of Farmland compared to ~~31,431.9~~ 31.9 for the Proposed Project. ~~Moreover, Alternative 3 would result in conversion of only 12 acres of Farmland that supports walnut orchards from production while the Proposed Project would result in conversion of 29 acres.~~

While Alternative 3 would result in the least impacts on agricultural resources, due its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. Therefore, while Alternative 2 would result in slightly greater impacts to Farmland compared to Alternative 3 (but ~~7,26.3~~ 26.3 acres less than the Proposed Project), it would not result in significant unmitigable impacts to biological resources and therefore is selected here as the Environmentally Superior Alternative.

**TABLE ES-2
SUMMARY OF SIGNIFICANT UNMITIGABLE (CLASS I) ENVIRONMENTAL IMPACTS
OF THE PROPOSED PROJECT AND ALTERNATIVES**

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 34.4<u>31.9</u> acres of Farmland (e.g., 46.4<u>16.8</u> acres of Prime Farmland, 0.7<u>14.4</u> acres of Farmland of Statewide Importance, and 44.3<u>0.7</u> acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.9<u>25.6</u> acres of Farmland (e.g., 9.5<u>10.0</u> acres of Prime Farmland, 0.6<u>15.0</u> acres of Farmland of Statewide Importance, and 43.8<u>0.6</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 46.7<u>18.2</u> acres of Farmland (e.g., 6.6<u>6.9</u> acres of Prime Farmland, 0.9<u>10.3</u> acres of Farmland of Statewide Importance, and 9.2<u>1.1</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30.7<u>31.6</u> acres of Farmland (6.7<u>7.1</u> acres of Prime Farmland, 24.0<u>24.5</u> acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

Executive Summary, page ES-16, Table ES-3, first row:

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Aesthetics	No Preference	No Preference	No Preference	No Preference
Agriculture Resources	Significant unmitigable impacts would include permanent removal of 31.4 <u>31.9</u> acres of Farmland and conversion of 20 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 23.9 <u>25.6</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 46.7 <u>18.2</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production. Preferred because it has the least impacts on agricultural resources	Significant unmitigable impacts would include permanent removal of 30.7 <u>31.6</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.

Executive Summary, page ES-17, Table ES-4, fourth row under Agricultural Resources:

4.2-4: Conversion of additional Farmland to non-agricultural use		4.2-4: Implement Mitigation Measure 4.2-2 Increase structure heights in new ROW containing walnut orchards	Significant unmitigable <u>Less than significant</u>
---	--	---	---

Section 4.5, *Cultural Resources*, page 4.5-21, bottom paragraph:

The Proposed Project would permanently remove approximately ~~31.4~~31.9 acres of Farmland, as described in Section 4.2, *Agricultural Resources*. Of this amount, ~~14.9~~16.2 acres are currently in citrus production.

Chapter 5, *Comparison of Alternatives*, page 5-2, bottom paragraph:

Significant unmitigable impacts on agricultural resources under the Proposed Project are identified as the permanent removal of ~~31.4~~31.9 acres of Farmland (e.g., ~~16.1~~16.8 acres of Prime Farmland, ~~0.7~~14.4 acres of Farmland of Statewide Importance, ~~14.3~~30.7 acres of Unique Farmland). Alternatives 2, 3, and 6 would also result in the permanent removal of ~~p~~Prime, ~~i~~Important or ~~u~~Unique ~~f~~Farmland, but the acreages vary by alternative (Table 5-1). Comparatively, the Proposed Project would result in the permanent removal of ~~31.4~~31.9 acres of Farmland while Alternatives 2, 3, and 6 would result in the permanent removal of ~~23.9~~25.6 acres, ~~46.7~~18.2 acres, and ~~30.7~~31.6 acres respectively.

Chapter 5, *Comparison of Alternatives*, page 5-3, Table 5-1:

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 31.4<u>31.9</u> acres of Farmland (e.g., 46.4<u>16.8</u> acres of Prime Farmland, 0.7<u>14.4</u> acres of Farmland of Statewide Importance, and 44.3<u>0.7</u> acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.9<u>25.6</u> acres of Farmland (e.g., 9.5<u>10.0</u> acres of Prime Farmland, 0.6<u>15.0</u> acres of Farmland of Statewide Importance, and 43.8<u>0.6</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 46.7<u>18.2</u> acres of Farmland (e.g., 6.6<u>6.9</u> acres of Prime Farmland, 0.9<u>10.3</u> acres of Farmland of Statewide Importance, and 9.2<u>1.1</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30.7<u>31.6</u> acres of Farmland (6.7<u>7.1</u> acres of Prime Farmland, 24.0<u>24.5</u> acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

Chapter 5, *Comparison of Alternatives*, page 5-4, Table 5-2, second row:

Agricultural Resources	<p>Impacts determined to be significant unmitigable impacts to agricultural resources.</p> <p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 46.4<u>16.8</u> acres of Prime Farmland; 	<p>Impacts would be similar to Proposed Project but to a lesser degree.</p> <p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 9.5<u>10.0</u> acres of Prime Farmland; 	<p>Impacts would be similar to Proposed Project but to a lesser degree.</p> <p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 6.6<u>6.9</u> acres of Prime Farmland; 	<p>Impacts would be similar to Proposed Project but to a lesser degree.</p> <p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 6.7<u>7.1</u> acres of Prime Farmland;
------------------------	---	---	--	--

<ul style="list-style-type: none"> • 0.7<u>14.4</u> acres of Farmland of Statewide Importance; and • 44.3<u>0.7</u> acres of Unique Farmland. • TOTAL = 31.4<u>31.9</u> acres <p>Less than significant impacts would include permanently removing 29 acres of Farmland that supports walnut orchards from production.</p> <p>Most impacts on agriculture</p>	<ul style="list-style-type: none"> • 0.6<u>15.0</u> acres of Farmland of Statewide Importance; and • 43.8<u>0.6</u> acres of Unique Farmland. • TOTAL = 23.9<u>25.6</u> acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>	<ul style="list-style-type: none"> • 0.9<u>10.3</u> acres of Farmland of Statewide Importance; and • 9.2<u>1.1</u> acres of Unique Farmland. • TOTAL = 16.7<u>18.2</u> acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p> <p>Least impacts on agriculture</p>	<ul style="list-style-type: none"> • 24.0<u>24.5</u> acres of Farmland of Statewide Importance; and • 0 acres of Unique Farmland. • TOTAL = 30.7<u>31.6</u> acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>
--	--	--	---

Chapter 5, *Comparison of Alternatives*, page 5-7, bottom of page:

- **Agricultural Resources** – Impacts would be significant and unmitigable for all alternatives. Compared to the Proposed Project, Alternative 3 would permanently remove the least amount of Farmland, followed by Alternative 2 and then Alternative 6. ~~All three alternatives would remove approximately one half the acreage of walnut orchards that would be removed from production under the Proposed Project.~~

Chapter 5, *Comparison of Alternatives*, page 5-8, Subsection 5.4.2:

The Environmentally Superior Alternative would have ~~two~~one significant unmitigable (Class I) impacts on agricultural resources and one significant unmitigable impact on cultural resources. ~~The impacts on agricultural resources would include permanent removal of 23.925.6 acres of Farmland (e.g., 9.510.0 acres of Prime Farmland, 0.615.0 acres of Farmland of Statewide Importance, and 13.80.6 acres of Unique Farmland) and conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive....~~

Response O24-57 The Applicant has several concerns about Mitigation Measure 4.2-1b, page 4.2-12. The first comment, which states that “growing season” may vary depending on crop type and the particular landowner, is noted.

The second comment requests that the requirement that SCE submit documentation to CPUC demonstrating landowner coordination and location of replacement crops and trees be deleted (Chapter 8, *Mitigation Monitoring, Reporting and Compliance Program*, page 8-12). However, documentation demonstrating such coordination is required to verify that Mitigation

Measure 4.2-1b is, in fact, implemented; as such, this requirement cannot be deleted. The documentation can take various forms, including a signed letter of agreement or acknowledgement by the landowner.

The third comment expresses the opinion that replacing crops on a one to one basis may be excessive, as crops have a limited lifespan and landowners would be fully compensated for any crop take. Comment noted. See Response O24-58.

- Response O24-58 The Applicant expresses the opinion that crop and tree replacement is not a significant environmental impact and that mitigation to replace crops and trees does not apply. If trees and crops are not replaced, formerly productive Farmland would be converted to non-agricultural use, which is a significant impact. In order to maintain productivity at pre-project levels, impacted crops and orchards must be replaced at a one-to-one level. SCE's plans to compensate landowners for any crop take would address financial impacts to avoid potential environmental impacts; as such, mitigation is appropriate. This issue is particularly relevant to orchard crops which require extensive re-establish periods (typically 5 or 10 years) for new plantings to reach full productive maturity. The CEQA relevance of potential project-related economic losses to existing landowners as well as modification to the proposed Mitigation Measure 4.2-1b are discussed further in the Master Response 4.7 (Non CEQA Issues).
- Response O24-59 The Applicant provides clarification regarding the maintenance buffer surrounding towers. See Response 024-56.
- Response O24-60 The Applicant objects to Mitigation Measure 4.2-2 for fiscal reasons and because the agricultural lands impacted by the project would not necessarily be subject to similar restrictions if developed by a third party. Comment noted. In response to the Applicant's assertion that the term "permanently converted" is undefined, the Applicant is referred to the Draft EIR, Section 4.2, Agricultural Resources, page 4.2-12, bottom paragraph, which states: "...the Proposed Project would cause permanent disturbance to Farmland due to construction of new permanent access roads and placement of 114 new poles and lattice towers. A 50-foot maintenance buffer would surround each pole and tower." (The final sentence regarding the maintenance buffer around towers has been updated, per Response O24-56.)
- Response O24-61 The Applicant expresses the opinion that farmers' decision whether or not to plant crops on Farmland formerly covered with walnut trees is an economic decision, and that the Farmland is not permanently unusable (Section 4.2, *Agricultural Resources*, Impact 4.2-4, page 4.2-15). The EIR analysts found that the economic feasibility of planting an alternative crop in the ROW, in an area entirely surrounded by walnut orchards, is highly questionable and

likely variable depending on the specific circumstances of the property and land owner. Consequently, for the Proposed Project, the permanent removal of 24.4 acres of walnut orchards would have a real potential to result in the conversion of a significant amount of agricultural land to non-agricultural use. These impacts would be less than significant with mitigation discussed under Response O24-6.

- Response O24-62 The Applicant states that CPUC should not have a role in the review and approval of detailed designs or construction plans as a prerequisite to any agreement between SCE and individual property owners for relocation of existing irrigation and drainage facilities (Draft EIR, Section 4.2, *Agricultural Resources*, Mitigation Measure 4.2-5, page 4.2-16). The Applicant is correct that it is not necessary, for CEQA purposes, that SCE or its contractors provide documentation to the CPUC detailing measures used for every existing drainage and irrigation system. It is necessary, however, that SCE submit documentation demonstrating to the CPUC that Mitigation Measure 4.2-5 have been implemented, that existing levels of irrigated water are maintained, and that landowners are consulted during the construction plan development process. Therefore, the text from the Draft EIR (Chapter 8, *Mitigation Monitoring, Reporting and Compliance Program*, page 8-13, Impact 4.2-5, Monitoring/Reporting Requirements) has been modified as follows:

SCE to submit ~~construction plans and~~ documentation demonstrating compliance and landowner coordination to CPUC for review.

- Response O24-63 The Applicant's assertion, that Alternative 2 would cross proportionately more Farmland than the Proposed Project, is incorrect. The Draft EIR, Section 4.2, *Agricultural Resources*, states that Alternative 2 crosses proportionately less Farmland than the Proposed Project. As shown on Table 4.2-3 (page 4.2-5), the Alternative 2 ROW crosses 226.2 acres of Farmland, out of the 340.7 acres required by the entire route. Thus, the Alternative 2 ROW consists of approximately 66 percent Farmland. The Proposed Project crosses a lesser total Farmland acreage (208.5 acres), but contains proportionately more Farmland as over 90 percent of the Proposed Project's total 231.01 acres of ROW is Farmland.

- Response O24-64 The Applicant points out that the Visalia-North Church monitoring station is located northwest of the Rector Substation. In response to this comment, the text found on page 4.3-2 of the Draft EIR is revised as follows:

Existing levels of air quality in the study area can generally be inferred from ambient air quality measurements conducted by SJVAPCD at its closest stations, the Visalia-North Church monitoring station located approximately three miles ~~northeast~~ northwest of the Rector Substation.

Response O24-65 The Applicant points out that not all sources of electricity generation contribute to increases in GHG emissions. To clarify information presented in the Draft EIR, text found on page 4.3-6 is revised as follows:

The accumulation of GHGs in the atmosphere regulates the earth's temperature; however, emissions from human activities such as combustion of petroleum, coal and natural gas associated with electricity production and the use of motor vehicles have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has contributed to an increase in the temperature of the earth's atmosphere and has contributed to global climate change.

Response O24-66 The Applicant states that Mitigation Measure 4.3-1a would impose a 10 ton per year ceiling on NO_x emissions rather than a significance threshold for construction related emissions. The Applicant also claims that the mitigation measure may make all other alternatives infeasible as the other alternatives would require more intense construction in a shorter amount of time due to annual outage constraints. The Applicant also points out that page 4.3-17 of the Draft EIR states that the Project is not subject to the SJVAPCD Indirect Source Review (Rule 9510).

The 10 ton per year ceiling for NO_x that the Applicant refers to is the operational CEQA significance threshold set by SJVAPCD, and was used here as a significance threshold for construction emissions in the absence of an established quantitative CEQA threshold for construction emissions.

While it is noted that more aggressive construction schedules associated with the alternatives would potentially lead to higher annual NO_x emissions than the Proposed Project, the requirements of Mitigation Measure 4.3-1a would not make any of the alternatives infeasible. The mitigation measure states that NO_x reductions may be achieved through any combination of on-site reduction measures and off-site reduction fees paid directly to SJVAPCD. Therefore, if the more aggressive construction schedule makes it infeasible for SCE to reduce NO_x emissions to 10 tons per year or less using onsite reduction measures, reduction fees paid directly to SJVAPCD would offset the remaining emissions to a less-than-significant level and would therefore accomplish the mitigation as written.

Rule 9510 is not mentioned anywhere on page 4.3-17 therefore it is unclear to what the Applicant is referencing. However, the third paragraph on page 4.3-18 states that "The Proposed Project would be subject to SJVAPCD's Rule 9510, Indirect Source Review". This determination was made through consultation with the SJVAPCD.

Response O24-67 The Applicant states that Mitigation Measure 4.3-1b should be revised to account for the fact that bullets 8 through 12 are only applicable to sites that are large in area and do not apply to a 200 foot by 200 foot area cleared to install a transmission structure. The Applicant also notes that installing sandbags is an erosion control measure and should be removed. Furthermore the Applicant would like the requirement to suspend excavation and grading activities during high winds to be limited to those activities wherein other dust control measures are no longer effective.

Bullet 8 requires that traffic speeds on unpaved roads be limited to 15 miles per hour. While it is noted that each individual work site would be small, this measure would still be applicable due to the overall length of the Project. Furthermore, due to the linear nature of the Project a large amount of travel would occur on unpaved roads, thereby making it even more crucial that this measure be implemented to reduce fugitive dust emissions. Bullet 12 would also be applicable due to the overall size of the construction area. While each pole site would be relatively small, the cumulative work area may be substantial. Therefore it is not unreasonable that precautionary measures such as limiting the amount of disturbed area be implemented.

With regard to bullets 9 through 11, the Mitigation Measure is revised as follows:

Mitigation Measure 4.3-1b: During construction, SCE and/or its contractors shall implement the following dust control measures.

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the

end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden).*

- Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Limit traffic speed on unpaved roads to 15 mph.
- ~~Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.~~
- ~~Install windbreaks at windward side(s) of construction areas.~~
- Suspend excavation and grading activity when winds exceed 20 mph when visible dust emissions exceed 20 percent opacity at the construction fenceline.
- Limit area subject to excavation, grading, and other construction activity at any one time.

Response O24-68 The Applicant states Mitigation Measure 4.3-3 does not mitigate a significant impact and that the measure is an unreasonable and burdensome solution to an insignificant issue. Since such measures are not required anywhere else in SCE's territory, the Applicant claims that this measure would create a laborious and costly on-going maintenance issue for SCE. The Applicant also raises issues regarding whether it would be feasible for them to implement, without landowner approval, some portions of this mitigation measure on access roads which would be on private property.

The intent of the mitigation measure is to reduce fugitive (e.g., wind-blown) PM10 and PM2.5 emissions from permanently disturbed areas and new access and spur roads in a manner consistent with SJVAPCD Rule 8501. Therefore, it is appropriate to clarify the measure to reinforce its intent and eliminate portions of the measure that would be infeasible to implement. The text found on page 4.3-20 of the Draft EIR is revised as follows:

Mitigation Measure 4.3-3 ~~includes~~ is adapted from measures recommended by the SJVAPCD to help mitigate fugitive PM10 and PM2.5 emissions from open areas. Implementation of this measure would reduce impacts to less than significant.

Mitigation Measure 4.3-3: After construction, SCE shall, ~~in perpetuity~~ during operation of the project, utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions from ~~permanently disturbed land operations and maintenance clearance areas around poles and towers, and from new access and spur roads:~~

- Apply and maintain water ~~or dust suppressants~~ to all un-vegetated areas; or
- Establish ~~native~~ landowner-approved vegetation that is compliant with SCE line clearance requirements ~~on all previously disturbed areas;~~ or
- Apply and maintain landowner-approved surface treatments (e.g., gravel or crushed stone) ~~gravel or apply and maintain chemical/organic stabilizers/suppressants to all open areas.~~

Response O24-69 The Applicant states that a project that does not individually reduce its emissions by 30 percent is not necessarily in conflict with AB 32 and that this criterion is not listed on page 4.3-24 of the Draft EIR. The Applicant believes that by demonstrating consistency with CARB's 39 Recommended Actions and by emitting less than 7,000 metric tons of CO₂e per year, the Project would be consistent with AB 32.

The Applicant is directed to note that consistency with the State's GHG reduction goal under AB 32 is clearly stated as significance criterion f) on page 4.3-13 of the Draft EIR. In the absence of clearly established threshold criteria for GHGs, it is the lead agency's obligation under CEQA to determine an appropriate level of significance. In that regard, the CPUC has determined that the combination of criteria described in the Draft EIR provides a sufficient basis for making a significance determination. To clarify the criteria listed on page 4.3-24 of the Draft EIR for consistency with significance criterion f), the text has been revised as follows:

1. The potential for the project to conflict with the 39 Recommended Actions identified by CARB in its Climate Change Proposed Scoping Plan which includes nine Early Action Measures; and
2. The relative size of the project's GHG emissions in comparison to CARB's proposed operational significance threshold of 7,000 metric tons per year.
3. The project's consistency with the State's GHG reduction goal under AB 32, which would require a minimum 30 percent reduction of GHGs by 2020 compared to business as usual conditions.

Response O24-70 The Applicant states that Mitigation Measure 4.3-8a is unnecessary and should be deleted. Since this argument is based on the Applicant's incorrect reasoning in Comment O24-69, the mitigation measure will be retained.

Response O24-71 The Applicant states that with regard to Mitigation Measure 4.3-8b, landowners may want the opportunity to keep removed trees and green waste for their own purposes. The Applicant also states that there may be other comparable wood and green waste programs in addition to the Tulare County program and that SCE should be allowed to dispose of removed trees and green waste at any comparable green waste facility.

In response to this comment and to clarify Mitigation Measure 4.3-8b, text found in the Draft EIR is revised as follows:

Mitigation Measure 4.3-8b: During construction, SCE shall dispose of all removed trees and other green waste via the Tulare County's Wood and Green Waste Program or through a comparable program subject to approval by the CPUC. Landowners shall be permitted to keep removed trees if specifically requested, under the condition there would be no open burning of trees and green waste. To ensure compliance with this program, SCE shall:

- collect all wood and green waste generated from the removal of orchard trees separately from other construction and demolition waste, and place wood and green waste in a separate recovery area;
- keep wood and green waste free of contaminants such as dirt, rock concrete, plastic, metal and other contaminants which can damage wood waste processing equipment, and reduce the quality of the compost; and
- prohibit the inclusion of yucca leaves, palm fronds or bamboo (which cannot be included in the salvage program) from the wood and green waste recovery area.

Response O24-72 The Applicant states that Mitigation Measure 4.3-8c is not roughly proportional to the impact and that there is no rationale for this mitigation measure as there is no environmental impact. Furthermore, the Applicant claims that there is no legal requirement to mitigate for crop removal and cites the fact that farmers can remove trees at any time and are not required to mitigate the loss. The Applicant also states that developers removing trees to develop new residential uses would not be required to replace trees. The Applicant also claims that the cost to implement the mitigation measure is unknown and is not reflected in the SCE cost estimate provided to the CPUC in the CPCN proceeding. Finally the Applicant notes that the text should be revised with "in Tulare County" removed to allow the flexibility to plant trees anywhere in California.

The CPUC believes that the mitigation measure is clearly proportional to the impact, since the replacement ratio of 1.5 to 1 (rather than 1 to 1) is a modest increase to allow for plant mortality in the tree planting program and to provide an adequate margin of safety to ensure that the loss of carbon sequestration is fully offset. In contrast, accepted replacement ratios for sensitive habitat and endangered species is often as high as 3:1 and sometimes as high as 10:1. Clearly, there is also an essential nexus between the mitigation measure (tree replacement) and the impact (permanent tree removal). Therefore, the comment that the mitigation measure is not roughly proportional to the impact is noted here as a contrary opinion.

While the precise quantitative impact of permanent tree removal is unknown, there is sound scientific evidence that trees sequester carbon and therefore removal of trees would result in a reduction of carbon sequestration. Therefore, the commenter's claim that there is no environmental impact from tree removal has no merit.

A farmer's decision to remove a tree on his or her land would not be subject to the requirements of CEQA and therefore is not comparable to the Proposed Project. Furthermore, with regard to tree removal associated with residential developments, appropriate mitigation must be determined by the lead agency reviewing the project. For the Proposed Project, the lead agency has determined that permanent removal of 2,900 trees would be a substantial impact and therefore mitigation is warranted. Finally, the Applicant's statement that the cost of the tree replacement program was not included in their CPCN filing to the CPUC is, for CEQA purposes, largely irrelevant, as the cost would clearly not be so outrageous as to make the mitigation infeasible.

It is noted that since GHG emissions are a global impact, tree replacement would not necessarily have to occur within Tulare County to mitigate the impact. However, because the Project would be constructed (and the loss of carbon sequestration would occur) entirely within Tulare County, it would be preferable to accomplish the tree replacement in the same general vicinity. Accordingly, Mitigation Measure 4.3-8c is revised as follows to provide some flexibility:

Mitigation Measure 4.3-8c: Prior to the conclusion of construction, SCE shall establish, fund, and implement a tree replacement program ~~with the Urban Tree Foundation of Visalia, CA (or other comparable organization in Tulare County)~~ for the replacement of all permanently removed orchard trees on a 1.5 to 1 basis. In order of priority, the location for the tree replacement program shall be (1) Tulare County (utilizing an organization such as the Urban Tree Foundation of Visalia), (2) adjacent counties in the Central Valley, (3) elsewhere in California, or (4) a combination of (1) through (3). The tree

replacement program shall provide for ~~the Urban Tree Foundation to~~ selection of the appropriate tree species and suitable locations for the plantings, and shall also provide for the maintenance of the plantings for a minimum of one full year to maximize survival rate. SCE shall provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings. (Note: it is the intent of this mitigation measure to offset the loss of carbon sequestration from the permanent loss of trees, not to replace the loss of a particular crop; therefore, it is not required that the replacement trees be orchard species.)

Response O24-73 The Applicant states that Alternative 3 would most likely require more intense construction activities than the Proposed Project due to outage constraints.

In response to this comment and to clarify information provided in the Draft EIR, text on page 4.3-30 is revised as follows:

Construction activities associated with Alternative 3 are anticipated to take approximately 12 months longer than the Proposed Project due to the fact that Alternative 3 would require removal of 216 more single circuit lattice towers than the Proposed Project and installation of 45 more double circuit lattice towers and 40 more double circuit tubular poles. Construction of these additional structures would result in a greater amount of criteria pollutant emissions and GHG emissions. ~~However, since construction activities associated with Alternative 3 would be spread over a longer time period, emissions in any one 12-month period would be approximately the same as those anticipated from the Proposed Project.~~ Alternative 3 may require more intense construction activities due to outage constraints associated with working in existing ROW. However, implementation of Mitigation Measure 4.3-1a would ensure that NO_x emissions would not exceed 10 tons per year by requiring on-site mitigation measures, and if necessary, off-site reduction fees paid directly to the SJVAPCD.

Response O24-74 The Applicant states that burrowing owls are common to grassland areas. The comment is noted. Burrowing owls were not documented during biological surveys of the alternative alignments and the most recent census data (DeSante et al, 2007; CNDDDB, 2009) shows sporadic and infrequent species distribution in the project area.

Response O24-75 The Applicant states that appropriate habitat for vernal pool tadpole shrimp is not present in the Proposed Project area. Vernal pool tadpole shrimp occur within the alignment in the Stone Corral Ecological Reserve, and moderate

quality suitable habitat is present in several pools within the Alternative 2 alignment (though they would be spanned by the project).

- Response O24-76 The Applicant states that golden eagles have been observed on Alternative 2; however, does not identify specific nesting locations. The Draft EIR already presumes that golden eagle nesting opportunities are available on the Alternative 2 alignment (see page 4.4-16). Comment noted.
- Response O24-77 The Applicant identifies that spiny-sepaled button-celery is reported for the easternmost three miles of the Alternative 2 and 6 alignments. This general finding is based on spring 2009 botanical surveys by SCE and does not change the project analysis of presentation of potential impacts. As identified in Mitigation Measure 4.4-1a, rare plant surveys will be completed for the selected alternative and rare plant populations will be avoided whenever possible. If avoidance is not possible, Mitigation Measure 4.4-1b will be implemented to further avoid, minimize, and compensate for potential impacts.
- Response O24-78 The Applicant notes that gaining access to perform botanical surveys on private lands on the Alternative 2, 3 and 6 alignments is more onerous than for Alternative 1. Comment Noted.
- Response O24-79 The comment questions which department from Tulare County would be reviewing and approving the Noxious Weed and Invasive Plant Control Plan. The office of the Tulare County Agricultural Commissioner is the appropriate county office to review the plan.
- Response O24-80 The Applicant provides detail on project construction phasing, which is consistent with survey requirements in the Draft EIR. Comment Noted.
- Response O24-81 The intent of the golden eagle and Swainson's hawk nesting surveys is to provide for early identification of active nest sites well before construction begins. The Draft EIR provides that surveys be conducted 14 to 30 days prior to construction. The Draft EIR statement that surveys be conducted, "at least 14 days prior to construction," is consistent with the statement, "perform (a) preconstruction survey 14 to 30 days before the start of each new construction phase."
- Response O24-82 The Applicant is correct and the discussion on page 4.4-37 has been modified to the following:

Powerline electrocution is the result of two interacting factors: raptor behavior and structure pole design.

- Response O24-83 The Applicant states that, “inert tracking medium utilized for potential dens is not specified in the protocol survey requirements.” As identified in the Draft EIR (page 4.4-37), the requirement to monitor potential or known San Joaquin kit fox dens for activity is from the 1999 *USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox*, not from the 1999 *USFWS San Joaquin Kit Fox Survey Protocol for the Northern Range*. Kit foxes are presumed present throughout much of the project area, thus, application of the *Standardized Recommendations* guidelines is appropriate.
- Response O24-84 The Applicant notes that, per the APLIC guidelines, wire shielding is only used on power lines in areas with high avian collision risk. The discussion on page 4.4-39 has been modified to the following:
- In areas with high avian collision risk, shield wires to minimize the effects from bird collisions consistent with APLIC guidelines.
- Response O24-85 The Applicant questions the source of the Draft EIR’s stated 9:1 mitigation ratio for oak trees that are located within riparian habitat. This ratio was identified based on sensitivity of riparian habitat to disturbance and the long regeneration period for new plantings.
- Response O24-86 The Applicant identifies that a construction buffer should not be applied to wetlands because buffers are usually species-based. Buffers such as the specified 50 foot construction buffer are commonly applied to minimize disturbances to wetlands and are common components of Storm Water Pollution Prevention Plans (SWPPP), which specify Best Management Practices (BMPs) to prevent construction pollutants from contacting storm water. The stated buffer distance would apply to discretionary work activities such as equipment staging areas, spoils stockpiling and employee parking areas regardless of species presence.
- Response O24-87 The Applicant identifies that temporary impacts generally have a lower mitigation ratio than permanent impacts, which is correct. The first bullet for Mitigation Measure 4.4-9b discusses only one ratio for both permanent and temporary impacts, and is modified as follows to reflect temporary impacts to waters of the United States and waters of the State:
- Purchase or dedication of land to provide wetland preservation, restoration or creation. Temporarily disturbed waters of U.S. and waters of the State shall be restored in place at a 1:1 ratio (i.e., site restoration following construction). For permanent impacts, if on-site restoration is available and feasible, then a mitigation replacement ratio of at least 2:1 shall be used. If a wetland needs to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented.

- Response O24-88 The Applicant suggests changing Mitigation Measure 4.4-10, fifth bullet to allow SCE to acquire an oak tree or landmark tree removal permit from the City of Visalia to satisfy city oak preservation requirements. The measure was intended to facilitate compliance with City of Visalia tree mitigation policies. Thus, the fifth bullet of Mitigation Measure 4.4-10 is modified as follows:
- Replace lost valley oaks or landmark trees at a 5:1 ratio within the City of Visalia, or fund the replacement of such trees by the City consistent with the City of Visalia Oak Tree Mitigation Policy (Visalia Municipal Code sections 12.24.037 and 12.24.110);
- Response O24-89 The Applicant is correct that focused botanical and wildlife surveys would likely be required by the resource agencies (USFWS and CDFG) for Alternatives 2, 3, and 6, and that formal consultation would be required under the federal Endangered Species Act for impacts to threatened and endangered species under these alternatives. It is likely that required field surveys and agency consultation under these alternatives could add time delays of one year or more compared to Alternative 1. Such consultation would likely not be required under Alternative 1 because habitat for vernal pool associated threatened and endangered species does not occur on the alignment.
- Response O24-90 See Response O24-79.
- Response O24-91 See Response O24-89.
- Response O24-92 See Response O24-89.
- Response O24-93 The Applicant notes that the 1994 Avian Power Line Interaction Committee (APLIC) manual is the most updated manual that deals with avian collisions and should be referenced in the EIR. In 1994, APLIC published “Mitigating Bird Collisions with Power Lines: The State of the Art in 1994”, which is in the process of being updated. The companion publication “Suggested Practices for Avian Protection on Power Lines; The State of the Art in 2006,” provides techniques for reducing bird electrocutions. No citations were used from the 1994 APLIC manual; therefore it was not referenced in the Draft EIR.
- Response O24-94 The Applicant requested that the double “pre” be deleted on page 4.5-5, 2nd paragraph. Page 4.5-5 has been modified as follows:
- Nearer to the foothills of the Sierra Nevada, the Proposed Project and alternatives cross Mesozoic granitic, Mesozoic basic intrusive, and ~~pre~~ pre-Cenozoic granitic and metamorphic rocks.

Response O24-95 The Applicant summarizes SCE's contact with the NAHC and interested Native American parties, and states that the conclusion to be drawn from the NAHC's responses is that Native American resources in the Sacred Lands File were not threatened until Alternative 3 was added.

In response to this comment, the text on page 4.5-12 has been clarified to read:

Native American Contact

Contact was made with the NAHC in ~~November late October 2005 and April 2007~~, in order to request a search of their Sacred Lands File (SLF) for the Proposed Project alignment. The NAHC responded on November 8, 2005, that there were no known sacred sites within the Proposed Project area. Contact was again made on April 4, 2007, due to a change in the project description. The NAHC responded on April 23, 2007, that again no Native American resources had been identified.

~~In~~ On January 2, 2008, a search of the SLF was requested for the Proposed Project and alternatives. The NAHC responded on January 3, 2008, that there were sacred sites within the project area, but ~~could~~ did not specify whether the sites were located near the Proposed Project or an alternative. A January 3, 2008 phone conversation between Pacific Legacy and Dave Singleton of the NAHC, Mr. Singleton confirmed that resources were known to exist in the area, but stated that only representatives of the Native American Community were authorized to disclose their location in relationship to the project area. In April 2009, a search of the SLF was requested for Alternative 6. The NAHC responded that no sacred sites were located within the Alternative 6 project area.

Response O24-96 The Applicant disagrees with Mary Gorden's assessment of the archeological sensitivity of the Proposed Project and its alternatives. Ms. Gorden stated that the Proposed Project has the most sensitive alignment, while SCE believes that Alternatives 2 and 3 cross more archaeologically sensitive areas than the Proposed Project.

The EIR preparers took Ms. Gorden's comments into consideration as part of the information gathering process; however, as stated in Draft EIR Section 4.5.4, *Impacts and Mitigation Measures*, and Section 4.5.6, *Alternatives*, the Draft EIR preparers' conclusion is that with regard to archaeological resources, the affected areas for Alternatives 2 and 3 appear to be as sensitive as (or more sensitive than) the that for the Proposed Project.

Response O24-97 The Applicant states that approximately two-thirds of Alternative 2 was subject to pedestrian survey, including the eastern area shared with Alternative 6.

The text has been clarified in response to this comment. The text on page 2.5-13 has been changed to read:

All of the existing Big Creek 1-Rector and Big Creek 3-Rector transmission line ROW was surveyed, except for a small 0.25 mile segment south of Stokes Mountain. Portions of the proposed ROW for Alternative 3 and Alternative 2, and the majority of the alignment for the Proposed Project could not be systematically surveyed due to lack of landowner permission to access private property. Some of Alternative 3 was characterized by extremely steep slopes and could not be surveyed safely; survey of these areas was limited to those areas that personnel could safely access. The proposed ROW for Alternative 6 has not yet been systematically surveyed because it was added as a project alternative by the EIR team after the field work had been completed.

Response O24-98 The Applicant states that the portion of Alternative 6 that is shared with Alternative 2 has been archaeologically surveyed.

The text on page 4.5-16 has been changed to read:

The portions of Alternative 6 that are shared with Alternative 2 have been subject to systematic pedestrian archaeological survey; however, No archaeological survey has yet been conducted for the rest of the proposed ROW for Alternative 6.

Response O24-99 The Applicant states that the citation within impact 4.5-1 is incorrect.

The text on page 4.5-19 has been changed to read:

...Section ~~151246.4(b)(2)~~ 15064.(b)(4).

Response O24-100 The Applicant disagrees with the Draft EIR's statement that igneous granite and basic rocks are relatively resistant. The Applicant states that basic rock is significantly less resistant to erosion than granite rock.

In general, basic rocks can be considered somewhat less resistant to erosion than granite rock due to chemical composition, particularly with respect to the lower content of resistant minerals, especially quartz, in basic rocks. However, the basic rocks observed on Stokes Mountain were of gabbroic composition, with hard resistant outcrops of the rock. Also, a substantial

difference in the weathering and erosion between terrains underlain by granitic rock versus basic rock was not noted during the field reconnaissance, further supporting the statement that both types of rock in that area are relatively resistant to erosion.

Response O24-101 The Applicant believes that, based on the possibility of landslide scarps along the ridgeline of the upper weathered portion on Stokes Mountain, it is reasonable to conclude that the rock has the potential for moderate to high rates of erosion, including landslide.

In general, gabbroic rock such as that observed on Stokes Mountain is not known to be subject high rates of erosion. Further, although there are geomorphic features suggestive of landslides on Stokes Mountain, the actual presence of those landslides has not been confirmed with subsurface data. Also, if the landslides are present, it is not known on which rock materials the landslides are failing. Based on current data, it cannot be concluded that deep-seated landslides exist and that they are the result of failure of the basic rocks.

Response O24-102 The Applicant states that Union Elementary School is within a quarter mile from Rector Substation. Based on aerial photos and Figure 2-3a in Section 2, *Project Description*, Union Elementary School is actually 1,340 feet, or just over a quarter mile, from the southwest end of Rector Substation. Therefore, no revisions are necessary.

Response O24-103 The Applicant indicates that the provision in Mitigation Measure 4.7-1d that requires documentation to be provided to the CPUC showing that each worker has undergone WEAP training is not practical due to the nature of construction worker activities at the construction sites. However, this mitigation measure is a typical CPUC requirement on transmission line projects and has proven to be both practical and effective. Compliance is typically accomplished by providing a sign-in list from each WEAP training session. Accordingly, no changes in Mitigation Measure 4.7-1d are necessary.

Response O24-104 The Applicant indicates that implementation of Mitigation Measure 4.7-3b would be overly burdensome. However, the CPUC believes that implementation of Mitigation Measure 4.7-3b is necessary to reduce impacts to a less than significant level. Also see Response O20-12 for modifications to Mitigation Measure 4.7-3b that have been made to account for the results of consultation with the County Agricultural Commission.

Response O24-105 The Applicant states that SCE may need to obtain rights-of-entry by court order to conduct the soil sampling that would be required under Mitigation Measure 4.7-3b, which could take two to three months for each property

owner. The mitigation measure calls for submittal of a sampling plan at least 60 days prior to start of construction. However, it is anticipated in the mitigation measure that the actual sampling would be conducted after SCE had obtained rights-of-way for construction access. So Mitigation Measure 4.7-3b on page 4.7-16 of the Draft EIR is clarified as follows:

Mitigation Measure 4.7-3b: SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC at least one week prior to construction activities in the area to be disturbed.

Response O24-106 The Applicant contends that implementation of Mitigation Measure 4.7-6 would be vague, overbroad, burdensome, and potentially impracticable because there may be over 1,000 property owners within a mile of the route, all of whom would have to be consulted with regard to aerial spraying. However, there is no language in Mitigation Measure 4.7-6 that would require consultation with each landowner within one mile of the route. The measure simply states that “SCE shall consult with landowners to determine which aerial applicators cover agricultural parcels within one mile of the approved transmission line ROW.” The intent of the subject sentence is for SCE to put together a comprehensive list of aerial applicators that operate within one mile of the lines. It would not be necessary to consult with each landowner within a mile of the approved alignment to develop such a list. A clarification to Mitigation Measure 4.7-6 is provided below. Also see Response I95-4 for revisions to Mitigation Measure 4.7-6 to also cover helicopters used for frost control.

With regard to the portion of Applicant’s comment questioning why a map covering 10 miles on each side of the approved corridor is necessary, it is important that the aerial applicators and frost control helicopter pilots are provided with not only the alignment of the new transmission line but also the proximity and orientation of that new line with respect to other existing

lines and towers in the potential flight path. Upon further review, a 10-mile radius is not warranted in areas (like this project area) where large-scale, frequent aerial applications do not occur. Accordingly, this requirement has been reworded to change the map coverage to a 10-mile wide corridor centered on the final alignment (i.e., 5 miles on each side of the alignment). Mitigation Measure 4.7-6 on page 4.7-18 is revised as follows:

Mitigation Measure 4.7-6: SCE shall ~~consult with~~ contact landowners to determine which aerial applicators and helicopter pilots that offer frost protection cover agricultural parcels within one mile of the approved transmission line ROW. SCE shall provide written notification to all aerial applicators and helicopter pilots that offer frost protection stating when the new transmission line and towers would be erected. SCE shall also provide all aerial applicators and helicopter pilots that offer frost protection that operate in the area recent aerial photos or topographic maps clearly showing the location of the new lines and towers, as well as all existing SCE lines and towers within ~~±~~ 5 miles on each side of the approved corridor. The photos or maps shall also indicate the heights of the towers and conductors. SCE shall provide documentation of compliance to the CPUC.

Response O24-107 The Applicant states that the last sentence should be removed from Mitigation Measure 4.7-11a. The CPUC does not agree; however, the last sentence of Mitigation Measure 4.7-11a has been clarified as indicated below to clearly indicate that only objects that have the potential for induced voltages apply.

Mitigation Measure 4.7-11a: As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, and pipelines, that are within and near the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects that have the potential for induced voltages shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.

Response O24-108 The Applicant states that SCE may need to obtain rights-of-entry by court order to conduct the well inventories that would be required under Mitigation Measure 4.7-11b. Comment noted.

Response O24-109 Refer to Response 024-102.

Response O24-110 The Applicant notes that compliance with an FAA-required notification is included in the description for Alternative 6, but that compliance with existing laws and rules is called out as mitigation for the Proposed Project. Unfortunately, the Applicant does not provide any specific examples where

an existing law or rule is listed as a mitigation for the Proposed Project, so no response can be offered.

Response O24-111 The Applicant is concerned that Mitigation Measure 4.8-1 is arbitrary and not feasible to implement. In many areas, roads are a well documented and substantial source of sediment ultimately delivered to streams or other waterways; there is a wealth of public information concerning this relationship and the processes involved. This mitigation measure is not arbitrary and is commonly required (or measures similar to this) of projects that would install permanent roads. The slope (e.g., two-percent) should be measured over the entire length of road that passes within 300 feet of the specified waterway; though a two-percent slope may seem small, there are likely few areas within the valley segments that would meet such a criteria with respect to the relevant sections of new road.

Response O24-112 The Applicant suggests a slightly different mitigation measure than that proposed for Mitigation Measure 4.8-2. The following changes shall be incorporated into Mitigation Measure 4.8-2:

Mitigation Measure 4.8-2: If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), SCE and/or its contractor ~~shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with State hazardous waste disposal requirements~~ will stop work and call SCE's Regional Spill Response Coordinator to the site to make an immediate assessment. The property owner would be notified as well as the Tulare County Health Department, and the Tulare County Health Department would coordinate oversight of the cleanup.

Response O24-113 The Applicant questions why compliance with agency regulations is called-out separately as mitigation for the Proposed Project, while for the alternatives such compliance is considered part of the Project Description. In Section 4.8, Hydrology and Water Quality, no where is an existing regulatory requirement or action called-out and introduced as a Mitigation Measure.

Response O24-114 The applicant requests clarification of the existing land uses associated with the project stated in the Draft EIR. Accordingly, the Draft EIR, Section 4.9 *Land Use, Planning and Policies*, page 4.9-1, Existing Land Uses, Proposed Project, last paragraph, has been updated to provide clarification as follows:

The substations (i.e., Rector, Springville, Vestal, and Big Creek 3) that would receive electrical and safety upgrades as part of the Proposed Project and alternatives are located on land currently used by SCE for ~~utility~~ industrial purposes.

Response O24-115 The applicant is unclear about the dates of documents used in the last paragraph on page 4.9-3, and the third paragraph on page 4.9-4. In Section 4.9, *Land Use, Planning and Policies*, page 4.9-3 to 4.9-4, the eleven topical elements of the Tulare County General Plan are provided with each element's year of adoption. The "Tulare County, 2001" reference refers to the County of Tulare General Plan Policy Summary, published in December 2001 (see page 4.9-23 of the Draft EIR).

Tulare County did not finalize the update of their General Plan in 2008. A Draft EIR has been published for the General Plan 2030 update, but the final version has not been adopted by the County as of January 2010.

Response O24-116 The Applicant notes that permitted hours of construction for Fresno County listed on page 4.10-12 are incorrect and should be revised. Therefore, text on page 4.10-12 of the Draft EIR is corrected as follows:

...Fresno County restricts construction hours to between the hours of six ~~p.m.~~ a.m. and nine p.m. on weekdays and between the hours of seven a.m. and five p.m. on Saturdays and Sundays.

Response O24-117 The Applicant questions whether the CPUC has jurisdictional authority or expertise to "review and approve" blasting plans. The Applicant suggests that the mitigation measure be re-drafted to require that if SCE determines that blasting is required for any one or more construction activities, SCE shall provide the CPUC copies of such a blasting plan in advance of any such activity.

As the lead agency, the CPUC has the authority to require mitigation to lessen environmental impacts. In the case of Mitigation Measure 4.10-1, the CPUC would review blasting plans to ensure that at a minimum the plan includes the measures outlined on pages 4.10-13 and 4.10-14 of the Draft EIR. If the blasting plan does not meet these basic requirements the CPUC would have the authority to require that the blasting plan be revised to meet these requirements.

It is noted that blasting may not be required. Therefore in order to clarify the intent of Mitigation Measure 4.10-1, the Draft EIR text is revised as follows:

Mitigation Measure 4.10-1: If it is determined that blasting would be required, SCE and/or its contractors shall develop and implement a Blasting Plan for construction activities. The plan shall be submitted for review and approval by the CPUC...

Response O24-118 The Applicant states that SCE's construction noise is no different than any other construction noise taking place within Tulare County and the cities of Visalia and Farmersville. The Applicant notes that each jurisdiction has

designated hours during which construction may take place and if construction must occur outside of these hours then a variance is required. The Applicant also notes that the majority of the region is used for agricultural operations which are not restricted by a noise ordinance. Comment noted.

Response O24-119 The Applicant states that SCE has not determined if subsurface blasting would be required and if it is determined that blasting would be needed, such activities would occur below ground. Comment noted. See also Response O24-117.

Response O24-120 The Applicant claims that discussion of noise impacts associated with Alternatives 2, 3, and 6 is misleading because it does not disclose that the number of receptors exposed to construction noise would be approximately three times greater than for the Proposed Project. The Draft EIR clearly states on page 4.10-20 that “Alternative 2 would pass by a greater number of residential receptors than the Proposed Project, and would therefore be more likely to expose people to increased noise levels. Therefore, construction activities associated with Alternative 2 would be more likely to expose sensitive receptors to excessive noise levels and groundborne vibration.” Similar statements for Alternatives 3 and 6 are provided on page 4.10-21. However, in response to this comment, the text on page 4.10-20 has been clarified as follows:

However, Alternative 2 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

The text on page 4.10-21 regarding Alternative 3 has been clarified as follows:

Alternative 3 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

The text on page 4.10-21 regarding Alternative 6 has been clarified as follows:

Alternative 6 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

Furthermore, the Applicant notes that nighttime construction is not anticipated for the Proposed Project however the chances for nighttime construction during the construction of the alternatives would be much more likely due to outage constraints, and that would require three times the number of notifications than for the Proposed Project. Comment noted.

Response O24-121 The Applicant claims that Alternative 6 would require the removal of one residence. As stated in the Draft EIR, Section 4.11, *Population Housing*, page 4.11-7 to 4.11-8, "...Alternative 6 would avoid displacing any housing units or people, including the one residential housing unit located adjacent to the Proposed Project." Further, the road story maps for Alternative 6 provided in Appendix C of the Draft EIR do not show any residences within the Alternative 6 ROW.

Response O24-122 Please see Response I11-6.

Response O24-123 Regarding Mitigation Measure 4.14-1a, the Applicant states that they will not be entering into agreements with private parties who only have access easements to use the private roads. It should be noted that the intent of Mitigation Measure 4.14-1a is simply for SCE to coordinate construction activities at private road crossings with the applicable private property owners so the property owners can make the appropriate plans in order to lessen the effects of short-term private property access restrictions.

Response O24-124 Referencing Draft EIR page 5-3, under Proposed Project, second item, the Applicant claims that height restrictions in the ROW do not convert Farmland to non-agricultural use, and offers as evidence the current pattern of farming in the existing 100-year old ROW. It is acknowledged and disclosed in the Draft EIR that productive farming, including, in some places, walnuts, is occurring in the existing ROW, and that some crops are even growing right up into the lattice towers. However, for the Proposed Project, the Applicant has stated that a maintenance buffer of 50 feet around TSPs and 100 feet around lattice towers (within the ROW) would be kept clear of vegetation, and that a height limit of 15 feet would be imposed for any trees growing within the ROW. These restrictions would prevent walnuts from being farmed within the ROW (see Draft EIR Impact 4.2-4 on page 4.2-15 for a discussion of the impact rationale). Response O24-6 addresses impacts to walnuts in new and existing ROW. For the Final EIR analysis, impacts to walnut orchards in new ROW would be mitigated to less than significant with implementation of Mitigation Measure 4.2-4, and impacts to walnut orchards in existing ROW would be considered to be less than significant. See also Response O24-33.

Response O24-125 See Response O24-33.

Response O24-126 See Response O24-33.

Response O24-127 Applicant refers to Comment 3 below. The CPUC assumes the Applicant is referring to Comment 3 *above*, denoted as Comment O24-6, for purposes of this Final EIR. Accordingly, refer to Response O24-6.

Response O24-128 The Applicant wonders why alternatives were pursued to reduce unmitigable impacts to cultural resources (i.e., Big Creek Hydroelectric System Historic District) but not for Farmland. Applicant notes that taller structures and increased spans could result in fewer structures in turn resulting in fewer impacts to Farmland.

As discussed in Chapter 5, *Comparison of Alternatives* “Implementation of the Proposed Project and all three alternatives would result in a significant unmitigable (Class I) impact on cultural resources (i.e., the Big Creek Hydroelectric System Historic District). Although impacts to the Historic District would be of varying degrees (i.e., Alternative 3 would impact more features associated with the Historic District than the Proposed Project), the majority of the Historic District would remain intact; therefore, impacts of varying degree between the alternatives is not material enough to determine a preferred alternative from a cultural resources perspective.”

The Applicant is mistaken; the CPUC did not pursue alternatives to reduce the unmitigable impacts to the Historic District because, as discussed above, impacts to any one of the Historic District’s individual features results in an impact to the entire Historic District. Since neither the Proposed Project nor any project alternatives could be developed to avoid or reduce impacts within the Historic District, this impact could never be reduced to a less than significant level (even with mitigation) through the development of any alternatives. In order to meet the basic project objectives, modifications to components of the Historic District are inevitable. Accordingly, it is infeasible for the CPUC to develop alternatives that would avoid, minimize or substantially mitigate impacts to this Historic District.

However, alternatives were considered to reduce impacts to Farmland. As stated in the Draft EIR, Chapter 3, *Alternatives and Cumulative Projects*, on page 3-5, CEQA Guidelines Section 16126.6(a) requires that to be fully considered in an EIR, an alternative must have the potential to “avoid or substantially lessen any of the significant effects of the project”. Factors used to determine alternatives to be considered are included in Table 3-1, *Summary of Preliminary Significant Environmental Impacts of the Proposed Project*. The alternatives screening analysis considered permanent impacts to Farmland and removal of walnut orchards from production to determine which alternatives should be considered in the EIR.

Significant, unmitigable impacts to Farmland would occur under any project alternative irrespective of the engineering configuration. During its public outreach phase SCE redesigned the Proposed Project alignment and alternatives to respond to expressed community concerns related to visual and agricultural impacts. The preliminary design of the Proposed Project and alternatives considered the community concerns, known environmental

resource constraints, as well as implementation of best engineering practices. Alternative engineering configurations with taller structures, increased spans and fewer structures could decrease the number of acres of Farmland impacted. However, it should be noted that loss of Farmland is primarily based on the linear length of the project located within designated Farmland areas. Accordingly, the relative proportion of Farmland impacted would remain unchanged among the project alternatives. Even though taller poles and towers could result in a limited reduction to Farmland impacts, there would be countervailing resource impacts to other resources including visual resources. In response to Comment O24-6, the Final EIR does evaluate the use of taller poles and towers in ROW in which walnut orchards are located, and determines that with implementation of Mitigation Measure 4.2-4, impacts to walnut orchards could be reduced to less than significant.

Response O24-129 Applicant refers to Comment 3 below, the CPUC assumes the Applicant is referring to Comment 3 *above*, denoted as Comment O24-6 for purposes of this Final EIR. Accordingly refer to Response O24-6.

Response O24-130 The Applicant notes that five of the plant species identified on pages 6-5 and 6-6 are not expected to occur in the Alternative 1 alignment: striped adobe lily, San Joaquin Valley Orcutt grass, Greene's tuctoria, recurved larkspur and spiny sepaled button celery. The 2008 Stebbins *Biological Resources Study Report*, and Draft EIR Table 4.4-1 (page 4.4-11, et seq.) agree with this statement. Note that the easternmost portion feet of this alignment (roughly 500 feet) was not surveyed for rare plants due to access limitations.

To be consistent with Draft EIR Section 4.4, page 6-5 has been modified to the following:

Construction of the Proposed Project could result in both temporary impacts on special-status species (i.e., Kaweah brodiaea, Hoover's spurge, ~~striped adobe lily, San Joaquin Valley Orcutt grass,~~ San Joaquin adobe sunburst, ~~Greene's tuctoria, recurved larkspur, spiny sepaled button celery,~~ valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk and golden eagle) and their habitat.

Response O24-131 With regard to Alternative 1, the Applicant notes that the Big Creek-Rector Corridor may contain valley oak and/or landmark trees. While valley oaks may be present in the Big Creek-Rector Corridor, they are not subject to city or County tree protection ordinances. Comment Noted.

Response O24-132 The following sentence in the first paragraph of Draft EIR Appendix B has been modified as requested:

Units of measure are Gauss (G) or milliGauss (mG, ± one 1,000 of a Gauss).

Response O24-133 The Applicant requests that the fourth EMF reduction item on Draft EIR Appendix B page 3 be revised to not confuse with CEQA mitigation measures and to indicate that the four percent cost guideline is not an absolute cap. Therefore, the following clarification has been made to Draft EIR Appendix B page 3.

4. Total cost of ~~mitigation~~ field reduction measures should not exceed approximately 4 percent of the total cost of the Project.

Response O24-134 The fifth EMF reduction item on Draft EIR Appendix B page 4 has been revised as requested.

5. ~~Mitigation~~ Field reduction measures should have a noticeable reduction in the magnetic field level at the edge(s) of the right-of-way approximately 15 percent or more.

Response O24-135 The EMF guidelines exemption criteria discussion on Draft EIR Appendix B pages 2 and 3 have been modified as follows to more accurately reflect the exemptions identified in *EMF Design Guidelines for Electrical Facilities* (July 21, 2006; page 11).

~~Utilities may use the following guidelines to determine those specific types of projects that will be exempt from no/low cost field reduction:~~

- ~~1. Operation, repair, maintenance replacement or minor alteration of existing structures, facilities or equipment.~~
- ~~2. Restoration or rehabilitation of deteriorated or damaged structures, facilities or equipment to meet current standards of public safety.~~
- ~~3. Addition of safety devices.~~
- ~~4. Replacement or reconstruction of existing structures and facilities on the same site and for the same purpose as the replaced structure or facility.~~
- ~~5. Emergency restoration projects.~~
- ~~6. Re-conductoring projects except when structures are reframed or reconfigured.~~
- ~~7. Projects located on land under the jurisdiction of the Forest Service, Bureau of Land Management or other governmental agency.~~
- ~~8. Privately owned tree farms.~~
- ~~9. Agricultural land within the Williamson Act.~~

~~10. Areas not suited to residential/commercial development. Such areas might include steep slopes, areas subject to flooding or areas without access to public facilities.~~

~~The intent of the exemption criteria is to exclude two types of projects. The first type of projects are those that either replace or make minor additions or modifications to existing facilities. This will include pole replacements or relocations less than 2,000 feet in length. Those projects where more than 2,000 feet of line is relocated or reconstructed or where the circuit is reinsulated or reconfigured should be considered for low cost magnetic field management techniques.~~

~~The second type projects are those located in undeveloped areas.~~

The following criteria have been developed to determine those transmission and substation projects that would be exempted from the requirement for consideration of no-cost and low-cost magnetic field reduction measures:

1. *Emergency* – All work required to restore service or remove an unsafe condition.
2. *Operation & Maintenance* – Washing and switching operations; replacing crossarms, insulators, or line hardware; replacing deteriorated poles; maintaining underground cable and vaults; replacing line and substation equipment with equipment serving the same purpose and with similar ratings; and repairing line and substation equipment.
3. *Relocations* – Line relocation of up to 2000 feet; and installation of guy poles or trenching poles only.
4. *Minor Improvements* – Addition of safety devices; reconductoring up to 2,000 feet, where changing polehead configuration is not required; installation of overhead switches; insulator replacement; modification of protective equipment and monitoring equipment; and intersetting of additional structures between existing support structures.
5. *Projects located exclusively adjacent to undeveloped land— including land under the jurisdiction of the National Park Service, the State Department of Parks and Recreation, U.S. Forest Service, or Bureau of Land Management (BLM).*

Response O24-136 The Applicant requests that references to “mitigation measures” on Draft EIR Appendix B pages 3 and 4 be revised to “field reduction measures” to not confuse the EMF measures with CEQA mitigation measures. The following edit has been made to the third EMF reduction item on Draft EIR Appendix B page 3. In addition, please refer to Responses O24-33 and O24-34.

3. ~~Mitigation~~ Field reduction measures should not compromise the reliability, operation, safety or maintenance of the system.

Response O24-137 The Applicant states that requiring SCE to provide the CPUC with written quarterly reports is inconsistent with past CPUC requirements. The Applicant notes that for past projects the CPUC has issued reports to SCE documenting performance. The Applicant also states that the requirement that reports be submitted “as long as mitigation measures are applicable” is excessive in light of a mitigation measure that is proposed to be implemented in perpetuity.

Requiring the Applicant to provide the CPUC with written quarterly reports is not inconsistent with past CPUC requirements. The CPUC has required SCE submit quarterly reports in the following recent projects: El Casco System Project, Kimball Substation Project. Moreover, for the San Onofre Nuclear Generating Station Proposed Steam Generator Replacement Project, the CPUC required weekly reports. Therefore, the requirement of quarterly reports will be retained. The Applicant is correct that the CPUC’s Mitigation Monitor does submit reports to the CPUC documenting performance and that these reports are also available to the Applicant; however, this does not negate the requirements that SCE provide quarterly reports to the CPUC.

As discussed under Response O24-68, a clarification to Mitigation Measure 4.3-3 in Section 4.3, *Air Quality*, to replace “in perpetuity” with “life of the project.” Thus, the Applicant’s comment about reporting “as long as mitigation measures are applicable” being excessive is moot.

Letter O25, Schute, Mihaly & Weinberger LLP (representing the City of Visalia)

Response O25-1 The commenter requests identification of the parcels within the existing and proposed ROW of the Proposed Project and alternatives within the City of Visalia, a description of the current uses on each of those parcels as well as a description of proposed uses on those parcels following construction of the Proposed Project, The commenter also requests identification of parcels that may be precluded from development as a result of the Proposed Project or alternatives.

Appendix I of the Final EIR provides a table listing all parcels, by number, through which the Proposed Project and/or the alternatives would traverse. The table identifies the relevant City and/or County land use designation of the site, as well as the zoning designation. The table also provides a description of the current uses on each parcel, as identified by the Tulare County Assessor’s office, as well as crop data identified by SCE, when applicable.

Draft EIR Section 4.2, *Agricultural Resources* (Appendix G in the Final EIR), analyzes the impacts of the Proposed Project and alternatives to agricultural resources. The agricultural resources analysis identified the lost Farmland acreage that would be occupied by the transmission poles and their maintenance buffer zones. This acreage would be land that would no longer be available for farming or other future development. These lost Farmland impacts were determined to be significant and unavoidable.

Elsewhere within the existing ROW, the land use on most of parcels traversed by the Project would not change upon completion of construction. Similarly, within the new ROW land uses would also generally remain the same after the addition of SCE's new transmission line easement. One exception, as discussed in Section 4.11, *Population and Housing*, page 4.11-5, in a single parcel where "construction of the Proposed Project would displace one residential housing unit, located adjacent to Structure #38." Nevertheless, the majority of the parcels through which the Proposed Project and alternatives cross are in agricultural production or used for ranching. These properties would remain in production after completion of the Proposed Project.

It is unclear what is meant by the commenter when requesting that parcels that may be precluded from *development* as a result of the Proposed Project or alternatives be identified. Due to federal, state and utility regulations and policies, respectively, structures are not permitted to be constructed within the ROW; however, structures can be constructed up to the ROW and other land uses are compatible with utility ROW's including recreation, open space, certain agricultural crops, ranching, etc. Therefore, no parcels would be entirely precluded from development as a result of the Proposed Project or an alternative.

Response 025-2

The commenter states that the Draft EIR should provide additional information on SCE's ROW negotiations process and the properties for which ROW easements would need to be acquired. The commenter also asserts that SCE will expand its existing easement rights over its ROW lands to decrease the current landowners use other the ROW properties or will seek fee ownership of the properties. The commenter also states that they believe that future blight conditions could result from the ROW acquisition.

Section 4.2, *Agricultural Resources*, of the Draft EIR evaluated the potential agricultural resource associated with future acquisition of new ROW for the Proposed Project and alternatives. The analysis identified both permanent impacts from lost Farmland acreages (i.e. for the future transmission monopoles and maintenance buffer areas) and the new cultivation restrictions that would eliminate walnut production within the ROW. Most other

agricultural uses of the ROW outside the maintenance buffers would continue to be permitted. However, as a conservative assumption the Draft EIR assumed that existing walnut orchards with the ROW of the Proposed Project or alternatives would not be converted to other productive agricultural use. The estimated acreage losses from the new ROW requirements (Appendix G) were identified as significant and unavoidable impacts.

The Draft and Final EIR analyses adequately represent the potential impacts on local Farmland by accurately determining the total lost Farmland acreage under the Proposed Project and alternatives. Furthermore figures 3.2a to 3.2j clearly identify the location of the expected lost Farmland acreages.

See Response I92-4 for discussion of SCE's expansion of its easement rights for its existing ROW properties.

There is insufficient evidence to project that any future blight would result from the Proposed Project or alternatives. Given the relatively high quality Farmland and surrounding farm uses, most of the Farmland with the future ROW would either be maintained by SCE as part of maintenance buffer for their transmission monopole sites or would likely be used by local landowners for some productive agricultural use in a manner similar to the current practice within the existing ROW.

Response O25-3 The commenter states that the Draft EIR does not adequately address the following impacts of the Proposed Project: visual impacts, EMF, risk of wildfires, land use impacts in Visalia, growth of Visalia within the City's Urban Development Boundary (UDB), and land near the ROW that may be left underdeveloped or be developed for less desirable uses. Impacts to visual resources were addressed in Section 4.1, *Aesthetics*. Impacts from potential wildfires were addressed in Section 4.7, *Hazards and Hazardous Materials*. Land use impacts to the City of Visalia were addressed in Section 4.9, *Land Use, Planning, and Policies*. Please see Master Response 4.7 for issues outside the scope of CEQA, and Master Response 4.3 regarding EMF. The Proposed Project's potential for growth-inducing impacts were addressed in Section 6, *CEQA Statutory Sections*.

Response O25-4 The commenter claims the Draft EIR fails to adequately analyze impacts from Alternative 2, 3, and 6 as these routes would interfere with several projects contemplated for development within the City, including:

- regional sports park on a City-owned 100-acre parcel located between the existing SCE transmission lines and Avenue 152, just north of Mineral King Avenue

- a major arterial planned along the existing SCE ROW, referred to as ‘Visalia Parkway’
- the plan to continue to build out the city-wide 86-mile recreational trail system

With regard to the regional sports park, the Draft EIR acknowledges this future community park in the Proposed Project’s cumulative scenario in Chapter 3, *Alternatives and Cumulative Projects* (page 3-33) and Section 4.13, *Recreation* (page 4.13-2). Neither the Proposed Project nor the alternatives would contain a residential component that would result in an increased use of recreational facilities or require the construction or expansion of recreational facilities. Further, neither the Proposed Project nor any of the alternatives would require any portion of their ROW across or through the proposed park, so there would not be any direct impacts to the proposed park property. The commenter claims that, for Alternatives 2, 3, and 6, rebuilding of the existing Rector-Big Creek transmission lines and construction of the new proposed double circuit transmission line in the existing ROW adjacent to the proposed park would result in an increase in the industrial character and thereby interfere with the community’s use and enjoyment of the park. On the contrary, where the existing ROW runs adjacent to the proposed park, the alternatives would replace approximately nine pairs of lattice steel towers spaced approximately 220 feet apart with approximately two pairs of tubular steel poles spaced approximately 1,000 feet apart, thereby substantially reducing the density and profile of structures and lessening the existing industrial character. Further, any effect on the community’s use and enjoyment of the park is purely speculative, as the park does not currently exist and there is no established level of community use and enjoyment.

In their second point, the commenter asserts that the Draft EIR must analyze how the construction of Alternatives 2, 3, or 6 would impact construction of the planned Visalia Parkway, a 4-lane arterial that would parallel portions of the existing SCE ROW generally between Highway 198 northward to the St. Johns River. However, there are no engineered plans for the Visalia Parkway with a level of detail that would support any meaningful analysis of potential impacts, so any such assessment would be purely speculative. Further, the general alignment drawing of the Visalia Parkway submitted by the commenter clearly identifies the existing SCE 150-foot ROW, and so it can be concluded that any design plans for the Parkway would have to consider some degree of coordination with SCE regardless of whether any of the transmission line alternatives were built. Were Alternative 2, 3, or 6 not be constructed, the Parkway would face potentially greater construction challenges, as the existing tower structures in the ROW are much lower in height and spaced closer together than would be the case with any of the alternatives.

The commenter also notes that the City of Visalia plans to build out a city-wide 86-mile recreational trail system as shown on the City of Visalia Trail Linkages Plan (provided as Exhibit C in the commenter's letter). The commenter notes that several policies in the Conservation, Open Space, Recreation and Parks (CORPS) element of the City's General Plan call for restoring, enhancing, and maintaining the natural, scenic, historic and open space quality of the City's creek corridors and open spaces. This portion of the commenter's letter merely establishes the existence and intent of the CORPS policies and does not raise any issue with regard to any potential impact of the Proposed Project or the alternatives. See Response O25-5 for a response to the commenter's specific concerns regarding potential impacts to the trail system.

Response O25-5 The commenter is concerned about Alternative 2, 3, and 6 creating visual and recreational impacts to the St. Johns River trail and the Mill Creek trail, in the City of Visalia. Regarding potential visual impacts, the commenter is referred to Response O25-11.

Regarding potential impacts to recreation, Section 4.13, *Recreation*, has been amended to include setting information and an analysis of the St. Johns River trail and the Mill Creek Trail. As such, the following changes have been made to the Draft EIR:

Page 4.13-2, second paragraph from the bottom:

The park would be 100 acres, with a planned build-out date of 2012 (Shepard, 2008).

The City also has two designated trails in the vicinity of Alternatives 2, 3 and 6. The St. Johns River Trail is located on the levee of the St. John's River. The trail traverses the northern portion of the City of Visalia from Riggin Avenue to approximately 400 feet east of the existing SCE transmission line for a distance of roughly three miles. The path follows the levee on the south side of the river primarily as an asphalt trail, although the easternmost 400 feet is composed of asphalt grindings. Trail users consist of bicyclists and pedestrians, as well as school children traveling to and from Golden West High School and Valley Oak Middle School. A city parks representative estimates that the average use of the trail is between 50 and 75 bicyclists and pedestrians per day, not including school children (Shepard, 2009).

The Mill Creek trail runs a distance of approximately 0.4 miles along the south side of Mill Creek between McAuliff Street and the existing SCE ROW. The trail is a wide dual-use concrete sidewalk designed to be used for pedestrians and bicyclists. A park representative estimates

that the average use is approximately 20 people per day, including bicyclists and pedestrians (Shepard, 2009).

Page 4.13-4, City of Visalia Waterways and Trails Master Plan:

The City of Visalia Waterways and Trails Master Plan is a map that includes existing and future parks, bike paths and trails, as well as potential rest and staging areas. As discussed in the Setting, Cutler Park (a County owned and operated park), as well as the St. Johns River Trail and the Mill Creek Trail (City owned and operated trails) would be located in the vicinity of the Proposed Project and alternatives...

Page 4.13-7, Alternative 2:

Like the Proposed Project, Alternative 2 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. ~~Compared to the Proposed Project,~~ Alternative 2 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. ~~Compared to the Proposed Project,~~ Alternative 2 would require the removal of an additional 158 existing towers and the construction of an additional 44 towers and poles. As such, total project construction of Alternative 2 is estimated to be approximately 20 months, which is eight months longer than the Proposed Project. Construction of Alternative 2 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park; school children using the trail as a path to and from school would enter and exit the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and ~~However, the additional time necessary for construction of Alternative 2~~ would not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 2 would be less than significant (Class III).

Page 4.13-7, Alternative 3:

Like the Proposed Project, Alternative 3 would not contain a residential component that would result in an increased use of existing recreational

facilities, and would not include or require the construction or expansion of recreational facilities. Alternative 3 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. Compared to the Proposed Project, Alternative 3 would require the removal of an additional 216 existing towers and the construction of an additional 79 towers and poles, ~~compared to the Proposed Project.~~ Consequently, total project construction of Alternative 3 is estimated to be approximately 24 months, which is 12 months longer than the Proposed Project. Construction of Alternative 3 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park; school children using the trail as a path to and from school would enter and exit the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and ~~However, the additional time necessary for construction of Alternative 3~~ would not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 3 would be less than significant (Class III).

Page 4.13-7, Alternative 6:

Like the Proposed Project, Alternative 6 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Alternative 6 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. Compared to the Proposed Project, it is estimated that Alternative 6 would require the removal of more existing towers and the construction of more poles, though it would require the construction of fewer towers. Total project construction of Alternative 6 is estimated to be approximately 16 months, which is four months longer than the Proposed Project. Construction of Alternative 6 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park;

school children using the trail as a path to and from school would enter and exit the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and ~~However, the additional time necessary for construction of Alternative 6~~ would not result in substantial physical deterioration of recreational facilities. Therefore, impacts to recreational resources resulting from implementation of Alternative 6 would be less than significant (Class III).

The following reference has been added to Draft EIR Section 4.13, Recreation:

Shepard, 2009. Paul Shepard, Management Analyst, City of Visalia Department of Parks and Recreation. Personal correspondence October 12, 2009 and October 13, 2009.

- Response O25-6 The commenter expresses the opinion that the Draft EIR fails to adequately address the project's inconsistency with the Visalia General Plan. See Response O10-8, which is applicable to the City of Visalia as well.
- Response O25-7 The commenter expresses the opinion that the Draft EIR fails to adequately address the project's inconsistency with the Visalia General Plan. See Response O10-8, which is applicable to the City of Visalia as well.
- Response O25-8 The commenter expresses the opinion that the Draft EIR fails to identify any mitigation for the project's significant land use impacts, and recommends that SCE develop cooperative agreements with the City of Visalia to explore recreation and open space facility development within the ROW. The commenter's belief that the project has significant land use or recreation impacts is incorrect; as shown in the Draft EIR, Section 4.9, *Land Use, Planning and Policies*, and Section 4.13, *Recreation*, the Proposed Project and alternatives would have a less than significant impact on land use and no impact on recreation. As such, there is an insufficient nexus between the project and these less than significant impacts to require mitigation measures for developing the conjunctive uses recommended by the commenter, such as a linear park or trail. Moreover, as discussed above under Response O10-8, the City of Visalia has no jurisdiction over this project and therefore, consistency with the General Plan is not required. However, General Order No. 131-D, Section XIV.B does require that in locating a project "the public utility shall consult with local agencies regarding land use matter."

Furthermore, it would be outside of the CPUC authority to impose on SCE a mitigation measure to develop a linear park or pathway since the project has no significant impacts to land use or recreation requiring mitigation.

Imposing such any such mitigation requirements would also convene the fundamental CEQA principal that a mitigation measure must be roughly proportional to the project's impacts. Therefore, it is outside the scope of the Draft EIR for it to require any land use or recreation mitigation measures.

Response O25-9 The commenter expresses the opinion that the Draft EIR fails to discuss the extent and severity of the impacts identified and also fails to analyze impacts to certain user groups. The commenter furthermore maintains that the Draft EIR does not impose all feasible mitigation measures, and provides inadequate analysis of the impacts on visual resources in and near the City of Visalia, especially in relation to views of the Sierra Nevada.

Regarding project impacts in existing ROW, the commenter is specifically concerned that the increased height of the new poles, the increased number of conductor lines from six to twelve, and the changed configuration of the conductors (from one set of horizontal lines to three sets) would dramatically increase the visual impact and prominence of the transmission structures and conductors. The Draft EIR, Section 4.1, *Aesthetics*, discusses project impacts in existing ROW under Impact 4.1-5, starting on page 4.1-42. The increased height of the towers and the switch from lattice towers to poles is addressed in the Draft EIR, page 4.1-43, second paragraph: "the replacement poles would extend further into the sky than the existing poles, as they would be almost twice the height; however, the new tubular poles would be fewer in number and would have a simpler, more streamlined profile. As a general rule, when transmission line structures are viewed from 'immediate foreground' (0 to 300 feet) or 'foreground' viewing distances (300 feet to one-half mile) from developed or urbanized sensitive receptor locations, such as residential areas, city parks, or pedestrian environments, tubular steel poles have a smaller visual impact than lattice steel towers." The increased number of conductors, the new configuration of the conductors, and the increased conductor height were all considered in the analysis as part of the visual features of the new pole and tower structures. The increased number of conductors and the new configuration are presented in the simulations in Figures 4.1-3b and 4.1-4b.

The new towers would be seen in the context of the existing facilities located within the current ROW. Although the number of conductors would increase and the conductors and transmission structures would be taller, the proposed transmission line would result in only a limited and incremental visual effect that would not substantially alter the intrinsic character or composition of the existing view.

Regarding the commenter concerns impacts to views of the Sierra Nevada from the new transmission line in the existing ROW, impacts to views of the

Sierra Nevada are discussed in the Draft EIR (Section 4.1, *Aesthetics*). The visual effects were considered primarily from the perspective of motorists on SR 198 traveling east towards the mountains, and are analyzed under Impact 4.1-1 (page 4.1-39). Implementation of Mitigation Measure 4.1-1a would reduce the potential impacts to this viewshed to less than significant. Views of the Sierra Nevada for residents and from local roadways are also discussed under Impact 4.1-5 (page 4.1-47). Impacts were determined to be less than significant.

Response O25-10 The commenter claims that the Draft EIR fails to analyze the impacts resulting from taller transmission structures and increased number of conductors that would be visible above the tree line and which would obstruct the views of the Sierra Nevada and other mountains. See Response O25-9. The commenter is also referred to Figure 4.1-9b which provides a simulation of the view from SR 198 near Road 212 looking east towards the Sierra Nevada. While visible from SR 198, the conductors would not obstruct the views of the distant mountains. Implementation of Mitigation Measure 4.1-1a would reduce potential impacts to less than significant.

Response O25-11 The commenter expresses concerns that the Draft EIR fails to analyze the Project's visual impacts on individuals who would see the transmission lines from public parks and pathways, including the St. John's River Trail, the Mill Creek Bike Path, and the city park in the River Run Ranch development in northern Visalia.

The Draft EIR analyzes the visual impact to users of the region two most commonly used parks at Kaweah Oaks Preserve and Cutler Park and the visual impacts to these locations were both determined to be less than significant.

The St. Johns River Trail is located on the levee of the St. John's River. The trail traverses the northern portion of the City of Visalia from Riggin Avenue to approximately 400 feet east of the existing SCE transmission line for a distance of roughly three miles. The path follows the levee on the south side of the river primarily as an asphalt trail, although the easternmost 400 feet is composed of asphalt grindings. Views of the existing transmission line range from fully obscured by intervening vegetation and structures to open and panoramic. Views of the transmission line are visible near Golden West High School, approximately 500 feet west of McAuliff Road. Construction of Alternatives 2, 3 and 6 would result in a low to moderate visual contrast, as existing transmission facilities including lattice towers and conductors are an established part of the current viewshed. The new poles would be taller than the existing towers, but there would be fewer structures and the poles would be visually more streamlined than lattice towers. The overall visual change

would be low to moderate. The visual sensitivity of the park is a function of its visual quality, viewer types and volumes, and viewer exposure. The St. Johns River Trail's visual quality is representative/distinctive, with views of the St. Johns River alongside views of residential developments and schools. Viewers from the trail would consist of bicyclists and pedestrians, as well as school children traveling to and from Golden West High School and Valley Oak Middle School. A city parks representative estimates that the average use of the trail is between 50 and 75 bicyclists and pedestrians per day, not including school children (Shepard, 2009). The number of visitors would consequently be considered low. View duration would be moderate, as trail users would see the poles beginning from a distance of approximately 0.6 miles, and their views would range from partially screened to panoramic and open. As such, overall visual sensitivity of the St. Johns River Trail would be moderate to high. Since the Proposed Project would result in a low to moderate visual change to viewers, in conjunction with the site's moderate to high visual sensitivity, visual impacts would be adverse but not significant.

The Mill Creek trail runs a distance of approximately 0.4 miles along the south side of Mill Creek between McAuliff Street and the existing SCE easement. The trail is basically a wider concrete sidewalk than the City of Visalia otherwise requires for subdivision. The trail is dual-use for pedestrians and bicyclists. Views of the existing transmission line range from partially obscured by intervening vegetation to open and panoramic. For bicyclists and pedestrians traveling east, the transmission line is visible along the entire length of the trail. Construction of Alternatives 2, 3 and 6 would result in a low to moderate visual contrast, as existing transmission facilities including lattice towers and conductors are an established part of the viewshed. The new poles would be taller than the existing towers, but there would be fewer structures and the poles would be visually more streamlined than current lattice towers. The overall visual change would be low to moderate. The Mill Creek trail's visual quality is representative, with views of Mill Creek as well as views of residential developments. Future residential development of the area is also planned. Viewers would consist of bicyclists and pedestrians. A park representative estimates that the average use is approximately 20 people per day, including bicyclists and pedestrians (Shepard, 2009). The number of visitors would consequently be considered low. View duration would be low-moderate, as visitors to the park would see the poles starting from a distance of approximately 0.4 miles, and views would range from partially screened to panoramic and open. As such, overall visual sensitivity of the St. Johns River Trail would be moderate. Since the Proposed Project would result in a low to moderate visual change, given the location's moderate visual sensitivity, visual impacts would be adverse but not significant.

The River Run Ranch development park is a planned future park, to be located within the River Run Ranch residential development east of the SCE power line. The proposed park would be located south of the St. Johns River levee, and north of St. Johns Parkway. As of October, 2009, the City of Visalia did not have a date planned for the park's construction. The adjacent land is currently vacant and the park would not be built until homes are constructed (Shepard, 2009). Since the park is currently only proposed and there is no planned date of construction, potential visual impacts to the park are not evaluated.

Response O25-12 The commenter expresses the opinion that the Draft EIR underestimates the number of residents affected by visual impacts of the Proposed Project and alternatives, as well as the severity of the project's impact on their views. The commenter is dissatisfied that the document does not provide details regarding the exact number of residents that would be affected by an increased intensity of visual obstruction of the Sierra Nevada and by new visual obstruction of views.

The Draft EIR, Section 4.1, *Aesthetics*, and Section 4.9, *Land Use, Planning, and Policy*, identify the number of residences located within 300 feet of the Proposed Project and each alternative. As stated in the Draft EIR: "the Proposed Project would pass within 300 feet of approximately 87 residences, including 52 along the existing ROW and 35 along the new ROW" (page 4.9-1); "Alternative 2 would pass within 300 feet of approximately 216 residences, including 213 in the existing ROW and three in the new ROW" (page 4.9-3); "Alternative 3 would pass within 300 feet of approximately 214 residences along the existing ROW but would not pass within 300 feet of any residences along the new ROW" (page 4.9-3); and "Alternative 6 would pass within 300 feet of approximately 213 residences, including 202 along the existing ROW and 11 along the new ROW" (page 4.9-3).

The environmental setting and analysis in Section 4.1, *Aesthetics*, do not attempt to quantify the number of homes that currently have views of the existing transmission line, or would have views of the Project. Any such estimates would be highly speculative and unsubstantiated since consideration of site-specific conditions that allow or obstruct viewer exposure cannot be determined. This is particularly relevant to more distant views which will have greater potential for low view exposure as a result of trees and buildings that would obscure sight of the transmission facilities. Furthermore, besides likely overestimating the viewer volumes, such an approach would likely overstate the potential visual impact as the visual changes to long distance would generally be imperceptible. Consequently,

although the transmission lines may be visible, view changes at very long distance are considered to be less than significant.

Instead, the analysis takes the generally accepted approach of primarily considering the views from local roadways and areas of public use (i.e., recreational areas). The commenter cites *Ocean View Estates Homeowners Association Inc. v. Montecito Water District*. 116 Cal. App. 4th 396, 401-403 (2004) as evidence that the Draft EIR is required to analyze and mitigate aesthetic impacts to public and private views. As discussed under Response I68-4, views from residential communities are considered private views and as such their visual sensitivity is considered low since the number of affected viewers would be low. The Draft EIR used generally accepted significance criteria and standards for the visual impact analysis. Under these significance standards, the Proposed Project's impacts on private views in the project area would not be considered to be environmentally significant. This standard is consistent with court findings in *Mira Mar Mobile Community v. City of Oceanside* (2004), which state that such a standard may be adopted and used in an EIR, but may not be used as a bar to the initial preparation of an EIR.

Nevertheless, the Draft EIR considered visual impacts to private residences in Section 4.1, under Impact 4.1-5. The commenter is referred to pages 4.1-45 through 4.1-46, Local Roadways and Private Residents. For the 1.1 miles in which the Proposed Project would replace existing SCE structures, the new transmission structures would be visually prominent but "would represent an incremental visual change to a landscape setting in which existing utility poles prominently appear" (page 4.1-46). For the alternatives, the effect on residential views of the new transmission structures in existing ROW would similarly represent an incremental visual change. For the remainder of the Proposed Project and for the entirety of the alternatives, the impacts to private residences were determined to be less than significant.

Response O25-13 The commenter is dissatisfied with the Draft EIR's visual simulations and claims the simulations are inadequate because they fail to include any photos of the Sierra Nevada. The commenter is referred to Figures 4.1-9a and 4.1-9b, which portray the view from SR 198 near Road 212 looking east toward the Sierra Nevada. Figure 4.1-9b is a simulation of the Proposed Project as it would traverse SR 198. This key observation point was chosen specifically because SR 198 represents the most highly traveled road in the project area, and is an eligible State scenic highway with views of the Sierra Nevada. For additional information regarding the Draft EIR's analysis of impacts to views of the Sierra Nevada, see Response O25-9.

Response O25-14 The commenter expresses the opinion that the Draft EIR fails to adequately analyze the aesthetic impacts of the Proposed Project and alternatives. Specifically, the commenter states the opinion that the Proposed Project would cause long-term visual impacts due to construction as a result of heavy equipment use that would disturb soil and remove vegetation in the ROW. The commenter also claims that the Draft EIR fails to provide any mitigation measures for the soil and vegetation impacts. Finally, the commenter argues that indirect impacts of the aesthetic impacts would have adverse property value impacts that would result in neighborhood blight unless public recreation facilities are developed in the ROW as mitigation.

The Draft EIR Section 4.1.4, *Aesthetics*, discusses the Proposed Project and alternatives visual impacts both related to the temporary construction related impacts and the permanent impacts of the new transmission facilities in both the existing and new ROWs. Figures 4.1-3a to 4.1-13b provide visual simulations of the expected visual changes of the new transmission facilities. In addition, Draft EIR Section 4.2, *Agricultural Resources* (Appendix G in the Final EIR) also provides relevant analysis and mitigation related to the commenter's concern. Specifically, Mitigation Measures 4.2-1a provides mitigation measures for minimizing construction related soil damage and requires top-soil replacement or improvement to ensure its productivity after construction. In addition, Mitigation Measures 4.2-1b and 4.2-5 also require crop replacement and irrigation system repair after construction. This Mitigation Measure will ensure that productive use of the affected property will resume after completion of any construction activities on the properties. As a result, there would be no permanent impacts to most of the properties outside or within the ROW from the construction activities.

As discussed in Appendix G (updated Section 4.2, *Agricultural Resources*), the Proposed Project and alternatives would take some land out of production. The lost Farmland impacts were clearly identified and recognized as Significant Unmitigable impacts to agricultural resource. These impacts would primarily be from the 50 and 100 foot maintenance buffers required around the transmission pole and tower bases, respectively. Future use of the ROW for other agricultural production would be permitted (provided that the crop height does not exceed 15 feet) and given the high land quality and extensive local agricultural industry, it may be expected to occur over the longer term especially as farmers reconfigure their existing orchards in the future.

Irrespective, the commenter overstates the potential that reduced agricultural use of the ROW would have as visual impacts. As shown in the Figures 2-3a to 2-3j, and evidenced by the properties current agricultural use, the majority of ROW that would potentially be unvegetated would be located within Farmland areas. Consequently, much of it would be surrounded and obscured

by large orchards or other farming use. Furthermore, these areas are far less populated than the more urban locations and so motorists would be the primarily potential viewers of the impacts. Consequently, the visual impacts for the Proposed Project are predominantly associated with the transmission structures. Unlike most any potential ground area, the structures can be seen at far greater distances and have the potential to be far more visually contrasting than increase in less intensely vegetated (or arguably relatively unvegetated) areas located in the future ROW. As discussed in Section 4.1, *Aesthetics*, visual quality and contrast are components in evaluating the significance of future visual changes. Open space areas are not uncharacteristic of rural and farming – crop farmers may regularly fallow fields and the wide variety of crops grown in the area (Table 4.2-1) also indicate that there is currently considerable visual diversity to the local Farmland areas. Consequently, the Draft EIR’s focuses of its Visual Impact analysis on the Proposed Project and alternative transmission structures is appropriated and adequate to evaluate the aesthetic impacts.

Potential property value and economic impacts are discussed in Master Response, 4.7. See response O21-2 for discussion of potential development of public park uses within the ROW as project mitigation.

Response O25-15 The commenter expresses the opinion that the Draft EIR’s standards of significance are inadequate because the analysis does not consider inconsistencies with local and regional plans. The commenter asserts that the Draft EIR should be more conservative in its standards of significance since local cities and towns place a very high value on their visual resources (as evidenced by their local and regional plans). Alternatively, the commenter suggests that more justification is necessary on the basis for the standards of significance “given that the standards ignore inconsistencies with local plans and do not result in a finding of significant impacts.”

As discussion in Section 4.9, *Land Use, Plans and Policies*, under California Public Utilities Commission General Order No. 131-D, California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives. Although the Proposed Project is exempt from local land use and zoning regulations and discretionary permitting, General Order No. 131-D, Section XIV.B requires that in locating a project “the public utility shall consult with local agencies regarding land use matters.” Consequently, the Draft EIR has included information on the regional and local plans and policies that are relevant to each of the resource topics discussed in the document.

In considering this comment, it is evident that clarification should be provided regarding the relationship and jurisdiction of local agency plans and policies to Proposed Project. Throughout the Draft EIR, for each resource

topic, relevant local agency plans and policies have been identified and presented in the document for informational purposes. The regional and local agency plans and policies were also considered in the impact analysis both to assist in identifying important resources and to evaluate the resource impacts. For example, although not a state scenic highway, Highway 198 was determined to be a scenic resource based its status as an eligible State scenic highway and the Tulare County General Plan recognition of its importance as a regional visual resource.

However, as discussed in Section 4.9, *Land Use, Plans and Policies*, consistency with regional and local plans and policies is not required for the Proposed Project as CPUC has preeminent authority. To clarify the relationship and jurisdiction of local agency plans and policies to Proposed Project, the text from the Draft EIR (pg. 4.1-23, last paragraph) has been revised as follows:

“According to Appendix G of the CEQA Guidelines, significant aesthetic effects on the environment include substantial, demonstrable negative aesthetic effects, ~~conflicts with adopted environmental plans and goals of the community~~, substantial degradation of scenic vistas or highways, and/or the creation of light or glare.”

In addition, the following text has been added to the Draft EIR (pg. 4.1-24, immediately following the last paragraph under the heading Definition and Use of Significance Criteria):

. . . The key factors in determining the degree of visual change are visual contrast, project dominance, and view blockage.

As discussed in Section 4.9, *Land Use, Plans and Policies*, CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives. Although the Proposed Project is exempt from local land use and zoning regulations and discretionary permitting, General Order No. 131-D, Section XIV.B requires that in locating a project “the public utility shall consult with local agencies regarding land use matters.” Consequently, although CPUC has preeminent authority and local plan consistency analysis is not required, for informational purposes this EIR has identified and described relevant local agency plans and policies. These regional and local agency plans and policies were also considered in the impact analysis to assist in both identifying important visual resources and in evaluating the resource impacts.

Response O25-16 The commenter states the opinion that the Mitigation Measures proposed by the Draft EIR are inadequate to address the Project’s potential aesthetic

impacts. The commenter states primary concern for ROW areas near Visalia, Farmersville and Lemon Cove. The comment recommends that development of a multi-use public open space through existing and planned communities paid for by the Applicant to mitigate adverse visual and land use impacts.

The Draft EIR (Section 4.9, *Land Use, Planning and Policies*) found that impacts to land uses in Visalia, and other cities and communities in the project area, would be less than significant. Therefore, there is not a sufficient nexus to warrant implementation of any land use mitigation measures. For impacts to visual resources, the Draft EIR (Section 4.1, *Aesthetics*) determined that Mitigation Measures 4.1-1a (Treat Surfaces with Appropriate Colors, Finishes, and Textures), 4.1-1b (Use of Non-Specular and Non-Reflexive Materials), 4.1-2 (Reduce Visibility of Staging Areas), 4.1-3 (Placement of Pulling/Splicing Equipment), and 4.1-6 (Reduce Construction Night Lighting Impacts) were sufficient to reduce impacts from construction and operation to less than significant. See response O21-2 for additional discussion of the applicability of potential development of a public park within the ROW as project mitigation.

Response O25-17 The commenter recommends requiring an evergreen vegetative screen of sufficient height around the Rector Substation. The commenter recommends that screening should be provided on the north and western sides. As noted on pages 4.1-42 and 4.1-43, the proposed modifications to Rector Substation would involve minimal physical changes, occurring within the current fenceline and footprint of the existing substation. While the proposed changes could be visible from a limited portion of Road 148, the minor equipment improvements would generally be imperceptible to viewers. Furthermore, because the new equipment would be very similar to the existing facilities, it would blend in with the existing view which includes not only the substation facilities, but also other existing electricity infrastructure not related to the project (i.e., existing transmission alignments). Therefore, this incremental change from the proposed substation modifications to the area's existing visual quality would be inconsequential and would represent a less than significant impact. Since the Proposed Project would have a less than significant visual impact to the existing view of Rector Substation, SCE would not be required to provide any additional screening of Rector Substation.

The commenter also states that the Draft EIR is inadequate because it fails to analyze the feasibility of mitigation that would require the new transmission towers to match the existing towers spacing in locations where their two alignments would run parallel (i.e. along the first 1.1 miles of the Proposed Project and alternative alignments). The commenter recommends that SCE's new utility construction should match existing structure spacing and spans as

closely as possible in this area. As described in the Draft EIR on page 4.1-43, along the first 1.1 mile section located north of the Rector Substation, an existing wood pole distribution line is located on the east side of the roadway and the existing lattice steel towers are located on the west side. The Proposed Project would replace the lattice steel towers (approximately 63 feet tall) with approximately 120-foot-tall tubular steel poles. The Draft EIR did not analyze matching the spacing of the new tubular steel poles with the existing wood pole distribution line on the east side of the road as there would be substantially fewer tubular steel poles than existing wood distribution poles. Matching the distribution poles' span would require more tubular steel poles, resulting in an increased aesthetic impact.

- Response 025-18 The commenter states that the Draft EIR is inadequate due to its failure to require development of a public trail within the future ROW as mitigation for the Project's environmental impacts. See Response 025-8.
- Response 025-19 The commenter asserts that the Draft EIR fails to require or analyze undergrounding a portion of the Proposed Project. See Response 025-32.
- Response 025-20 The commenter expresses the opinion that the Draft EIR provides insufficient evidence that the Proposed Mitigation Measures would reduce the Project's visual impacts to a less than significant level.

The Draft EIR, Section 4.1.4, *Aesthetics*, discusses the Proposed Project's and alternatives' permanent visual impacts of the new transmission facilities in both the existing and new ROWs. Figures 4.1-3a to 4.1-13b provide visual simulations of the expected visual changes of the new transmission facilities. The visual impact analysis discusses the factors and aspects of the project resulting in the impact findings presented in Section 4.1.4. The visual "contrast with the form of the natural landscape" of the transmission poles and towers is identified by the impact analysis as a noticeable factor causing significant visual impacts within those project areas with moderate to high visual sensitivity.

CEQA requires that mitigation measures be feasible procedures which could minimize significant adverse impacts, and that there is an essential nexus between the mitigation measures and a legitimate governmental interest (Section 15126.4). Mitigation Measures 4.1-1a and 4.1-1b have been specifically designed to modify those aspects of the project that can be altered to reduce its visual contrast (i.e., the transmission structure surfaces). Furthermore, the mitigation measures specifically require future development of a SCE Structure Treatment Plan with the consultation of a CPUC designated visual specialist to ensure that the most effective alignment/site specific treatments will be determined for the proposed SCE transmission facilities so that they blend in as well as possible with the surrounding

landscape. Similar mitigation measures have been approved for use by other similar transmission projects with potentially significant visual impacts (see Antelope-Pardee 500-kv Transmission Line Project Final EIR/EIS available at: [http://www.cpuc.ca.gov/Environment/info/asp/antelopepardee/EIR/Section 20C/C15-VisualResources.pdf](http://www.cpuc.ca.gov/Environment/info/asp/antelopepardee/EIR/Section%20C/C15-VisualResources.pdf)). Furthermore, additional mitigation measures in the Antelope-Pardee project specified that mono-poles similar to those designed for the Proposed Project and alternatives were required to be used instead of the more visually intrusive lattice towers.

It should be noted that implementation of the mitigation measures is not expected to completely eliminate the project's adverse visual impacts but instead to have the more limited and incremental effect of reducing the structures' obtrusiveness so that the structures' overall visual effects are less than significant.

Furthermore, the visual intent of the structure design may also contribute to reducing some viewers' sense of visual contrast. For such viewers, evidence of minimalist design (e.g., mono-poles instead of lattice towers) with treatment approaches sensitive to the surrounding natural context may be expected to reduce and minimize the structures perceived visual impact. As a result, overall the proposed Mitigation Measures 4.2-1a and 4.2-1b can be expected to reduce the Proposed Project's visual contrast within the overall landscape to ensure that the visual impact of the project will be less than significant.

Response O25-21 The commenter expresses the opinion that the Draft EIR should require Mitigation Measures 4.1-1a and 4.1-1b to be applied more broadly along the Proposed Project and the alternative alignments. Specifically, the commenter appears to disagree with the Draft EIR's "overall visual sensitivity" determinations. The commenter acknowledges that the Draft EIR proposes to apply the mitigation to "all structures that are visible from moderate to highly sensitive viewing locations" but counters that there are other towers that would be "located in sensitive viewing locations." The commenter then asserts that the "mitigation measures should be required in all areas where residents, park users or motorists would be exposed to views of the new transmission towers and lines."

The Draft EIR, Section 4.1.4, *Aesthetics*, discusses the Proposed Project and alternatives permanent visual impacts of the new transmission facilities in both the existing and new ROWs. Figures 4.1-3a to 4.1-13b provide visual simulations of the expected visual changes of the new transmission facilities. The impact analysis in Section 4.1, *Aesthetics*, clearly discusses the generally accepted methodology used by the Draft EIR impact analysis (an approach very similar to United States Forest Service (USFS) Guidance for Visual Impact Assessment on non-National Forest Lands). As stated on pages 4.1-1 and 4.1-2, the visual sensitivity of a physical change is based on the

combined factors of the landscape's visual quality, the viewer types and volumes as well as the nature of the viewer's exposure to the change (i.e. including consideration of its visibility, viewing distance, angle of view as well as the breadth and duration of view). Depending on the combination of contributing visual factors, visual sensitivity determinations can vary from low to high. Table 4.1-2 summarizes the visual sensitivity findings for the affected region. As can be seen, Cutler and Kaweah Oaks Preserve were determined to have a low visual sensitivity due to their distances, largely obstructed views and limited visitor use.

The visual impact analysis determined its impact findings based on the significance criteria presented on pages 4.1-23 through 4.1-25. In addition, visual simulations of key representative viewpoints were also developed to assist evaluation of the visual impacts. The projected visual change (which could vary from low to high in severity) was correlated to visual sensitivity determinations for sections of the ROW alignments to determine the significance according to the guidelines presented in Table 4.1-3. Based on the approach, the analysis concluded that although the Project might result in adverse visual impacts, in many sections of the ROW these impacts would not qualify as significant (and therefore would not require mitigation).

However, in contrast to the Draft EIR's systematic approach for evaluating the visual impacts, the commenter asserts that visual mitigation should be required in any circumstance where an adverse visual impact would occur - regardless of any distinction in the magnitude of the project's visual change, the nature of the existing visual context or the number and type of affected viewers. This suggestion is too broad in scope and excessively burdensome in practice since it would be applicable to any project that has a visual impact (i.e. any project that could be seen and judged to have a non-beneficial effect on the visual landscape). The commenter also is, in effect, asserting that any visible (and presumably adverse) effect will represent a significant visual impact that consequently must be mitigated (if possible). This claim is not consistent with CEQA's guidelines that only require mitigation of "significant" impacts to the physical environment. Furthermore, a physical impact is only considered significant if it represents "a substantial, or potentially substantial, adverse change in the environment." By not differentiating the degree of visual sensitivity or evaluating the nature of the visual change, the commenter's proposed mitigation approach is too broad and does not adequately distinguish between "significant" and "less than significant" visual impacts.

Response O25-22 The commenter claims the Draft EIR does not provide detailed documentation, including maps, identifying sensitive receptors that would be impacted by construction and operation of the Project. In addition to residences, the commenter notes that any affected motels, hotels, libraries

and religious institutions, hospitals, nursing homes, active sports areas, picnic areas, recreational areas, and playgrounds should be disclosed.

With regard to disclosure of sensitive receptors, pages 4.10-6 through 4.10-8 include a detailed discussion of potentially affected receptors for the Proposed Project and for each alternative. These pages include discussion of both residential receptors as well as other sensitive receptors such as schools, parks and churches. No hospitals, nursing homes or hotels have been identified within close proximity to the Proposed Project or alternatives.

- Response O25-23 The commenter states that the Draft EIR fails to evaluate the actual specific consequences of construction related noise on nearby sensitive receptors. The commenter notes that the Draft EIR should have provided a comprehensive analysis of construction noise impacts and description of the amplitude and duration of noise exposure at receptor locations along the entire length of each potential alignment. The commenter states that the Draft EIR fails to provide the evidentiary basis to conclude that construction-related noise impacts would be less than significant.

Construction noise impacts would be temporary in nature and would not result in a permanent increase in noise levels at nearby sensitive receptors. For this reason, construction noise is exempt from exterior noise level standards set forth in applicable local general plans and ordinances. Implementation of Mitigation Measure 4.10-4a would reduce potential noise levels from construction and would provide residents with a means to issue complaints regarding construction noise so that specific issues can be addressed and resolved.

The general comment that the analysis does not provide an evidentiary basis to conclude that construction related impacts are less than significant refers to specific comments O25-24 through O25-26, which are addressed below.

- Response O25-24 The commenter asserts that the Draft EIR's finding that the Project "would have the potential to impact nearby sensitive receptors" is a generic statement that does not meet CEQA's clear standards which require that an EIR provide a sufficient degree of analysis to inform the public about the Proposed Project's adverse environmental impacts. The commenter notes that elevated noise levels over the course of a few days would not be a source of concern however elevated noise levels over the course of the entire construction period would be a source of concern. The commenter states that an adequate analysis of construction noise impacts would include the locations of sensitive receptors in the Project area, a description of ambient noise levels, and predicted noise levels during each phase of construction at each sensitive receiver location, and a comparison of noise levels during construction to the existing ambient noise levels. Moreover, the commenter

claims that the Draft EIR provides no evidence to support that the mitigation measures would reduce noise levels to less than significant. The commenter also questions the feasibility of installing portable barriers around small stationary equipment and questions why no mitigation is offered for reducing noise from helicopter usage. In conclusion, the commenter claims substantial evidence has not been provided to support the significance conclusion.

Construction noise impacts and predicted noise levels are discussed on pages 4.10-15 thru 4.10-17 of the Draft EIR. As demonstrated in the text found on page 4.10-16, noise levels from construction equipment at nearby receptors would substantially exceed ambient noise levels, and would therefore have the potential to adversely affect such receptors. However, as noted by the commenter, such noise levels would not be a source of concern if they would only occur over the course of a few days whereas longer exposure durations would be a source of concern. As stated on page 4.10-16 of the Draft EIR, "Construction would occur at each pole site in batches... Therefore, equipment used to construct poles would not remain at one site for an extended period of time, thereby limiting the amount of time any individual receptor would be exposed to elevated noise levels". Therefore, consistent with the commenter's suggestion, impacts from construction activities would not be a source of concern as they would not expose receptors to elevated noise levels for a substantial period of time.

As noted on page 4.10-17 of the Draft EIR, "These [mitigation] measures would help reduce noise levels generated by construction equipment and would ensure that construction noise would not represent a significant nuisance to nearby receptors." Since the intent of the impact discussion is to determine if construction noise would adversely affect a sensitive receptor, requiring noise reduction and suppression techniques and notifying receptors of construction activities would ensure that construction noise would not represent a nuisance to nearby receptors thereby supporting the Draft EIR's conclusion that impacts would be less than significant with mitigation.

Portable noise barriers are a feasible option for reducing noise levels associated with small stationary equipment. With regard to helicopter noise, because of the very limited duration of that activity, it is reasonable to conclude that notifying nearby receptors of construction activities would reduce potential impacts to less than significant. To clarify this point, text found on page 4.10-16 of the Draft EIR is revised as follows:

Based on the analysis of a similar project, operation of a light-duty helicopter can be expected to generate noise levels of approximately 80 dBA at 200 feet (CPUC, 2006). These noise levels would have the potential to impact nearby sensitive receptors. However, as stated in Chapter 2, Project Description, helicopters would be used solely for

conductor stringing and would only be used for approximately 26 days. The helicopter would operate along different portions of the line each day; therefore no single receptor would be exposed to noise from helicopters for an extended period of time. Furthermore, helicopter flight paths would be primarily along the ROW and to and from staging areas. Implementation of Mitigation Measure 4.10-4a would ensure that residents are notified prior to activities, thereby reducing the impacts on receptors to less than significant.

Response O25-25 The commenter states that the Draft EIR's analysis of nighttime construction activities is legally deficient since it does not explore the effects that nighttime construction noise would have on sensitive receptors. The commenter also states that the Draft EIR fails propose adequate mitigation for impacts associated with nighttime construction. The commenter states that without specifying specific, measurable performance standards the effectiveness of the noise reduction plan is unknown and therefore is not sufficient to mitigate significant impacts.

Text on page 4.10-16 and 4.10-17 of the Draft EIR notes that nighttime construction may result in a significant nuisance to sensitive receptors. To add additional clarification on how nighttime noise may impact receptors, text found on these pages is revised as follows:

If nighttime (e.g., between 8:00 p.m. and 6:00 a.m.) construction activities are determined to be necessary, such activities could result in a significant nuisance to nearby residences. Nighttime construction activities may interfere with sleep and as a result may cause physiological and psychological stress.

With respect to the adequacy of Mitigation Measure 4.10-4b, the commenter claims that simply because the mitigation measure does not provide a specific, measurable performance standard it is inadequate. However, the mere absence of a performance standard is immaterial where no such performance standard could be shown to result in any greater effectiveness of the mitigation measure. In this instance, nighttime noise at any level may be perceived as a nuisance to nearby residences or other sensitive receptors. It is exactly for this reason that the mitigation measure includes best practices for noise avoidance and reduction, as well as for the temporary relocation of residents. Considering that, as noted in the Draft EIR, noise-generating activities at any one location would be of limited duration, the mitigation measure as stated is sufficient to reduce nighttime noise impacts to a less than significant level.

Response O25-26 The commenter states that the Draft EIR does not adequately analyze blasting impacts and that the Draft EIR preparers could have made some attempt to determine where blasting might be necessary, especially in the

more urbanized locations along the Project alignment. The commenter also states that the analysis could have identified the decibel level of explosions at different distances and the general peak particle velocity which would be used to evaluate the effect that blasting operations would have on noise sensitive receptors and buildings. The commenter states that the mitigation identified does not set forth specific vibration and settlement threshold criteria, but rather defers these criteria until the design process. To be sufficient, the commenter states that details related to vibration and settlement threshold criteria must be identified prior to Project approval.

As stated in the Draft EIR, SCE has not identified which tower and pole locations, if any, will require blasting for excavation of foundations. Further, in their comment letter on the Draft EIR, SCE clarifies that they may use blasting for installation of foundations in areas of shallow bedrock, and such use would take place far outside the Cities of Visalia and Farmersville (see Comment Letter O24, comment O24-117). Mitigation Measures 4.10-1 and 4.10-5 of the Draft EIR are crafted to further protect residents and structures from nuisance noise levels and vibration. Blasting would generate very short term, almost instantaneous, noise level increases. Additional precautions set forth in Mitigation Measure 4.10-1 and 4.10-5 would require public notification and require coordination with local agencies. Such measures would reduce nuisance impacts to less than significant. For clarification, the text on page 4.10-13 of the Draft EIR is changed as follows:

Impact 4.10-1: Blasting activities could expose people and/or structures to substantial vibration levels. *Less than significant with mitigation* (Class II)

Blasting activities may be required during road construction, grading, and foundation work in some locations if rock is present. Blasting activities typically generate the most noticeable vibrations associated with construction activities. Ground motion at levels not exceeding 0.5 PPV will not damage buildings, buried utilities, rock slopes, or any other facilities. For comparison, a person walking on the ground or floor of a structure will often generate motion exceeding 0.15 PPV and normal temperature and humidity changes create much higher strains in building materials (Revey, 2003). Areas where blasting would be utilized have not been determined; therefore, it is ~~difficult~~ not possible to assess the potential identify specific impacts on sensitive receptors and existing structures from groundborne vibration that would be caused by blasting activities . . .

In addition, the second bullet of Mitigation Measure 4.10-1 on page 4.10-13 is clarified to add a specific vibration and settlement threshold:

- A Blast Survey Workplan shall be prepared by the blaster. The Plan shall establish a vibration and settlement PPV threshold criteria limits of 0.5 inches per second (in/s) in order to protect structures from blasting activities, and shall identify specific monitoring points. At a minimum, a pre-blast survey shall be conducted of any potentially affected structures and underground utilities within 500 feet of a blast area, as well as the nearest commercial or residential structure, prior to blasting.

Finally, the fourth full bullet of Mitigation Measure 4.10-1 on page 4.10-14 is clarified to eliminate redundancy with the above change:

- ~~Vibration and settlement threshold criteria (for example PPV of 0.2 inches per second) shall be submitted by the blaster to the CPUC for review and approval during the design process. If the settlement or vibration and settlement criteria of 0.5 in/s PPV are~~ is exceeded at any time or if damage is observed at any of the structures or utilities, then blasting shall immediately cease and the CPUC immediately notified. The stability of any structures, creek canals, etc. shall be monitored and any evidence of instability due to blasting operations shall result in immediate termination of blasting. The blaster shall modify the blasting procedures or use alternative means of excavating in order to reduce the vibrations to below the threshold values, prevent further settlement, slope instability, and/or to prevent further damage.

Response O25-27 The commenter states that the Draft EIR concludes that corona noise levels from the Project would be just one decibel short of triggering a violation of the City of Visalia's nighttime noise standard of 45 dBA. The commenter believes that this one decibel is certainly within a margin of error and therefore disagrees with the conclusion that impacts from corona noise would be less than significant.

The Draft EIR states that the community noise equivalent level (CNEL) would be approximately 44 dBA at the edge of the existing ROW. This value assumes that the maximum predicted noise level from corona during wet weather conditions (37 dBA), would occur for 24-hours and adds a five dBA penalty for evening hours between 7 p.m. and 10 p.m. in addition to a 10 dBA penalty between the hours of 10 p.m. and 7 a.m. The City of Visalia exterior noise limit of 45 dBA is applicable to un-weighted noise levels of 45 dBA between the hours of 7 p.m. to 6 a.m. Furthermore, this limit represents a level that must not be exceeded for a cumulative time of 30 minutes over one hour. Therefore, even assuming the maximum noise levels of 37 dBA would occur consistently throughout the night, this noise level would not be within a margin of error for the City's exterior noise levels, and impacts are undeniably less than significant.

Response O25-28 The commenter states that the Draft EIR omits consideration of feasible mitigation measures and includes a list of measures that should be included.

The first mitigation measure recommended by the commenter is to increase the width of the ROW to allow increased separation from existing and future receptors. In order for this mitigation measure to effectively increase separation from existing receptors, the ROW would have to be moved from that which is proposed in the Draft EIR, and would itself result in greater impacts to Farmland and especially walnuts. Therefore, this mitigation measure is not included in the FEIR.

The second mitigation measure recommended by the commenter is similar to measures included in Mitigation Measure 4.10-4a. Therefore, to increase the effectiveness of this measure, the commenter's recommendations are added to the text (shown below).

The third mitigation measure recommended by the commenter would prohibit nighttime construction activities. This measure may not be feasible as nighttime construction activities may be required due to outage constraints within the existing ROW. Therefore, this mitigation measure is not included in the FEIR.

The fourth and fifth mitigation measures recommended by the commenter would prohibit nighttime hauling and would require that staging areas be located as far as feasible from existing receptors. These measures are feasible and are added to Mitigation Measure 4.10-4a of the Draft EIR to enhance its effectiveness (shown below).

The sixth mitigation measure recommended by the commenter would limit construction noise levels to 70 dbA during daytime hours and 50 dBA during nighttime hours. The feasibility of this measure is questionable and therefore this measure is not included in the FEIR.

The seventh mitigation measure recommended by the commenter would require that SCE offer temporary relocation to nearby residents whose interior nighttime noise levels due to Project construction activities exceeds 50 dBA with windows open. A similar measure is included in the Draft EIR under Mitigation Measure 4.10-4b. The measure in the Draft EIR states that SCE would offer temporary relocation of residents within 200 feet of nighttime construction areas.

The last mitigation measure recommended by the commenter would target helicopter noise and would require SCE to comply with the following: prepare a schedule reflecting hover times for equipment and construction crew drop offs and pick ups that would be made available to impacted

receptors at least two weeks in advance; prohibit hover times during evening and nighttime hours (i.e., between 8:00 p.m. and 6:00 a.m.); and to select routes to avoid direct flyovers above residences and other noise sensitive land uses to the extent feasible. Mitigation Measure 4.10-4a requires advance notification to impacted receptors during all phases of construction, including conductor stringing activities involving helicopters. However, to clarify and improve the effectiveness of the measure, text is added as show below. It is assumed that stringing activities would occur during the daytime, as nighttime construction activities would only be required due to outage constraints in the existing ROW. However, to clarify this assumption, limitations on hours of helicopter operations are added to Mitigation Measure 4.10-4a (shown below). As described in response O25-24, text has been added to the Draft EIR to clarify that helicopter flight paths would be primarily along the ROW and to and from staging areas. Therefore, the third part of the recommended mitigation measure is not necessary and is not included in the FEIR.

Per the discussion above, Mitigation Measure 4.10-4a is clarified as follows:

Mitigation Measure 4.10-4a: SCE and/or its contractors shall employ the following noise reduction and suppression techniques during project construction to minimize the impact of temporary construction-related noise on nearby sensitive receptors:

- All construction equipment mufflers comply with manufacturers' requirements. If impact equipment such as jack hammers, pavement breakers, and rock drills are used during construction, hydraulically or electric-powered equipment shall be used whenever feasible to reduce noise associated with compressed-air exhaust from pneumatically powered tools. However, where pneumatically powered tool use is unavoidable, the construction contractor shall place exhaust mufflers on the compressed-air exhaust and external jackets on the tools themselves where feasible.
- Nearby residents shall be notified of the construction schedule and how many days they may be affected by construction noise prior to commencement of construction activities. Notification during conductor stringing activities that include helicopter usage shall include a schedule of predicted hovering times and locations as well as helicopter flight paths. Notices sent to residents shall include a project hotline where residents would be able to call and issue complaints. All calls shall be returned by SCE and/or its contractor within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC weekly.

- Idling of engines shall be minimized; engines shall be shut off when not in use except in cases where idling is required to ensure safe operation of equipment or when idling is necessary to accomplish work for which the piece of equipment was designed (such as operating a crane).
- Compressors and other small stationary equipment shall be shielded with portable barriers when operated within 100 feet of residences.
- Equipment staging and parking areas shall be located as far as feasible from residential schools and buildings.
- Haul truck operations and helicopter operations shall be prohibited during the evening and nighttime hours between 8:00 p.m. and 6:00 a.m.

Response O25-29 The commenter is concerned that the Draft EIR fails to identify specific agricultural land within the City of Visalia that would be temporarily impacted by the project, and that mitigation for temporarily impacts is not identified for these lands. The commenter is referred to Draft EIR Section 4.2, *Agricultural Resources*, as updated for the Final EIR (see Appendix G), Mitigation Measure 4.2-1a (page 4.2-11 to 4.2-12), and Mitigation Measure 4.2-1b (page 4.2-12). While the agricultural impact analysis does not specify the acreage of impacted Farmland within Visalia or other communities, the analysis does fully identify the total temporarily and permanently impacted Farmland acreages. The permanently impacted Farmland includes the lost acreage as a result of both the new areas for the towers/poles and their accompanying maintenance buffer areas (i.e. the 31.1 acres *disturbed* by the Proposed Project of which 5.0 acres are currently producing walnuts shown in Table 4.2-5).

The identified mitigation measures apply to all temporarily impacted land, including land within the City of Visalia, and would ensure that soil is returned to preconstruction conditions, that construction is scheduled to minimize disruption of agricultural *operations*, and that impacted crops would be replanted at a ratio of one to one (where permissible). With implementation of Mitigation Measures 4.2-1a and 4.2-1b, temporary impacts to Farmland would be reduced to less than significant.

Response O25-30 The *commenter* expresses the opinion that the analysis of temporary impacts to Farmland (Impact 4.2-1) is inadequate, and that once land is taken out of walnut and orange tree production, it is likely the land will never return to agricultural production. As discussed in the Final EIR analysis (Appendix G), preparation of work areas and pull and tension sites would temporarily reduce the amount of Farmland available for agricultural purposes by approximately 50.7 acres. However, after completion of

construction, these acres could be returned to agricultural use. There would be no factors precluding farmers from using these lands for agricultural purposes, including the planting of walnut and orange trees; therefore, Farmland would not be converted to non-agricultural use. The CEQA relevance of potential project-related economic losses to existing landowners as well as modification to the proposed Mitigation Measure 4.2-1b are discussed further in the Master Response 4.7 (Non CEQA Issues).

Response O25-31 The commenter states that the cumulative impact analysis to agricultural resources was inadequate. The commenter states that the Draft EIR could have determined the cumulative acreage of Farmland that would be impacted. As noted in Draft EIR Section 4.2, *Agricultural Resources*, page 4.2-16, since several of the projects discussed in Section 3.6, *Cumulative Projects*, are not yet in the environmental planning stage, the acreage of Farmland that these projects may be expected to convert to non-agricultural uses is not known. However, in general, the acreage of Farmland in Tulare County is expected to decrease. The Proposed Project would contribute incrementally to this decline and irrespectively the impact would be significant, unmitigable.

Response O25-32 The commenter asserts that the Draft EIR fails to consider a reasonable range of alternatives, noting specifically that the Draft EIR does not analyze any alternative that includes undergrounding a portion of the transmission line, such as along SR 198 and along the proposed Visalia Parkway. Although the commenter expresses a contrary opinion, the Draft EIR did not identify any significant impacts to aesthetics, including along SR 198 and the proposed Visalia Parkway. For that reason, undergrounding portions of the proposed transmission line did not need to be evaluated as an alternative because there was no significant environmental effect that undergrounding would lessen or avoid.

Letter O26, Wildlands

Response O26-1 Comment Noted.

Letter O27, Department of Transportation

Response O27-1 The commenter requests that Mitigation Measure 4.14-1b be modified to include a requirement that an encroachment permit be approved by Caltrans as part of the Traffic Management Plan prior to commencement of any construction activities that affect a state route.

It should be noted that Mitigation Measure 4.14-1b already includes a requirement that documentation of agency approvals be submitted to the

CPUC prior to the start of construction activities. However, to clarify that agency approvals include Caltrans and local encroachment permits, the second sentence of Mitigation Measure 4.14-1b has been modified as follows.

Mitigation Measure 4.14-1b: SCE shall prepare and implement a Traffic Management Plan subject to approval of Caltrans and/or the applicable local government(s). The approved Traffic Management Plan and documentation of agency approvals, including Caltrans and local encroachment permits, shall be submitted to the CPUC prior to the commencement of construction activities. At a minimum, the plan shall...

Letter O28, Kaweah Pump Inc.

Response O28-1 The commenter is referred to Master Response 4.7 (Non-CEQA).

Letter O29, Tulare County Board of Supervisors

Response O29-1 The commenter is concerned about potential impacts to groundwater. The commenter is referred to Master Response 4.4.

Letter O30, Lemon Cove Ditch Company

Response O30-1 The commenter is concerned that Draft EIR Impact 4.2-5 does not adequately assess the potential for conversion of Farmland to non-agricultural use due to impacts to existing irrigation and other ancillary systems. See Master Response 4.1, which addresses impacts to irrigation infrastructure.

Letter O31, Department of Conservation, Division of Land Resource Protection

Response O31-1 The commenter requests that the Draft EIR provide an evaluation of all the potentially significant agricultural impacts of the project and a description of mitigation measures. The commenter is referred to the Final EIR, Appendix G.

Response O31-2 The commenter recommends use of the Division of Land Resource Protection's Land Evaluation and Site Assessment (LESA) Model as a tool for establishing the environmental significance of project-specific impacts on farmland, and for rating the relative value of alternative project sites. Comment noted. As described in Draft EIR Section 4.2, *Agricultural Resources* (page 4.2-1), the Draft EIR characterizes the environmental baseline for agricultural resources using Important Farmland Maps produced by the California Department Conservation's Farmland Mapping and Monitoring Program. The Draft EIR estimated the both the project related

Farmland acreage losses and evaluated the project's compatibility with the existing Williamson Act contract lands. Irrespectively, the Draft EIR analysis identifies a significant, unmitigable impact associated with the Farmland acreage that would be disturbed by the footprint of the new transmission poles and their maintenance buffer zones.

Response O31-3 The commenter suggests mitigation measures for significant impacts due to the conversion of prime agricultural land and the cumulative loss of Farmland. The commenter is referred to Mitigation Measure 4.2-2 (Appendix G), which requires that for each acre of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that is permanently converted, SCE shall obtain one (1) acre of agricultural conservation easements. This requirement is consistent with the commenter's first suggested mitigation measure.

The commenter also references a Department of Conservation listing of approximately 30 "conservation tools" that can be used to conserve or mitigate project impacts on agricultural land. Comment noted.

Response O31-4 The commenter correctly identifies the number and total acreage of Williamson Act parcels that would be permanently and temporarily disturbed by the Proposed Project and alternatives, and requests that the EIR address the potential impacts of the project on these parcels. The commenter is referred to Draft EIR Section 4.2, *Agricultural Resources* (the Final EIR version of this section is provided in this document as Appendix G). The Draft EIR assesses impacts to Williamson Act land that are designated Farmland, and assesses whether the project would conflict with Williamson Act contracts. For the Proposed Project and alternatives, temporary impacts to Farmland are less than significant with mitigation, and permanent impacts are significant unmitigable. The project would not conflict with Williamson Act contracts, as Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use. Furthermore, Code Section 51238.2 states that "(n)o land occupied by gas, electric, water, communication, or agricultural laborer housing facilities shall be excluded from an agricultural preserve by reason of that use." Accordingly, the Draft EIR concludes that use of portions of Williamson Act contract lands for the transmission line ROW (including the disturbed Farmland areas) would not result in termination or modification of the properties' existing Williamson Contract for such compatible uses. Consequently, the Agricultural impact analysis concludes that the project would have a less than significant impact on existing Williamson Contracts.

Response O31-5 The commenter describes the process by which public agencies are required to provide notice of the intention to acquire property located in agricultural

preserves on which to locate a public improvement (Government Code Section 51290 (b)). Comment noted. However, this comment is a legal issue, not an impact to the physical environment. As such, it is outside the scope of CEQA. Moreover, SCE will handle eminent domain procedures, not the CPUC.

References – Chapter 5

California Department of Fish and Game (CDFG), 2009. Rarefind 3. California Natural Diversity Database. California Department of Fish and Game, Biogeographic Data Branch, Sacramento, CA, December 2009.

Desante, D.F., Ruhlen, E.D. and S. Scalf. 2007 The Distribution and Relative Abundance of Burrowing Owls in California During 1991-1993: Evidence for a Declining Population and Thoughts on its Conservation. Proceedings of the California Burrowing Owl Symposium, pp. 1-41.

Martinez, 2009. Eliseo Martinez, Director of Public Works, City of Farmersville. Personal communication October 6, 2009.

U.S. Department of Agriculture, 2009. Colony Collapse Disorder: A Complex Buzz. Available at: <http://www.ars.usda.gov/is/AR/archive/may08/colony0508.htm>. Accessed January 11, 2009.

CHAPTER 6

Responses to Individual Comments

Letter I1, Dr. and Mrs. David Bockman

Response I1-1 The commenter expresses support for Alternative 3 primarily because of general concern about the impacts to agricultural resources and economic effects of the other alternatives. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I2, Kelly Anez

Response I2-1 The commenter is concerned that the Proposed Project would be near and visible from the Sequoia Union Elementary School. On page 4.12-4, second full paragraph, of the Draft EIR, it states that Sequoia Union Elementary School is located at 23958 Avenue 324 in the community of Lemon Cove, approximately 1,160 feet from the Proposed Project. The Project's potential visual impacts to local residents (including the school) are evaluated in Draft EIR, Section 4.1, *Aesthetics*, which concluded that the Proposed Project would not result in substantial adverse impacts to observers in the project area. Issues concerning health and safety impacts for residents living close to the Project are evaluated in Draft EIR, Section 4.7, *Hazards and Hazardous Materials*. The Draft EIR analysis concluded there are no hazards or hazardous materials that would potentially have any significant adverse health effects to local residents such as the Sequoia Union Elementary School teachers and students.

Letter I3, Jenna Mattison

Response I3-1 The commenter is referred to Master Response 4.2 for cultural resources.

Response I3-2 The commenter expresses support for Alternative 3 and asserts that the vernal pools that would be affected by that route are not viable. Please see Master Response 4.6 for information regarding Alternative 3, and Response O13-1 for information regarding potential impacts to the vernal pool habitat within the Stone Corral Ecological Reserve.

Letter I4, Larry Ronk

Response I4-1 The commenter expresses support for Alternative 3 primarily because of concern about the impacts to agricultural resources, water wells, and economic effects of the other alternatives. Please see Master Response 4.6 for information regarding Alternative 3, Master Response 4.7 for information regarding economic effects, and Master Response 4.5 for information regarding water wells.

Letter I5, Robert McKellar

Response I5-1 The commenter expresses support for Alternative 3. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I6, Robert and Mary Edmiston

Response I6-1 The commenter is concerned about potential impacts to water supply, groundwater wells, and the water table. Contrary to what the commenter asserts, the particular wells to be removed (if any) have not yet been identified. Wells to be removed would be identified through the process described in Mitigation Measure 4.7-11b. Concerning the potential impact to existing wells, the commenter is referred to Section 4.7, Hazards and Hazardous Materials, pages 4.7-23 to 4.7-24, and to Master Response 4.5. Regarding potential impacts to the water table, the commenter is referred to Master Response 4.4.

Response I6-2 The commenter is generally concerned about impacts to agricultural resources, specifically citrus orchards. Impacts to agricultural resources are discussed in Draft EIR Section 4.2, *Agricultural Resources*, and Appendix G of the Final EIR. This comment does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR.

Response I6-3 The commenter states the opinion that the Elderwood Valley is a prime location that possesses great natural beauty. This comment does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR. See Section 4.1, *Aesthetics*, for discussion of the project's impacts to the area's visual resources. The Draft EIR analysis determined that the impact to the area's visual resources from the Proposed Project and the alternatives would be less than significant with mitigation.

Response I6-4 The commenter states that the amount of productive citrus land impacted due to placement of lattice towers has not been addressed in the Draft EIR. The commenter is referred to Appendix G, the Final EIR analysis for *Agricultural*

Resources, which provides an analysis of impacts to agriculture, including citrus. As indicated in Table 4.2-8, Alternative 2 would permanently disturb approximately 0.1 acres of nectarine crops, 9.3 acres of oranges, and 1.7 acres of tangerines, resulting in a significant and unavoidable impact.

- Response I6-5 The Alternative 2 alignment through Antelope Valley traverses an area that supports a limited number of vernal pools. The distribution of pools within the alignment was characterized during repeat focused studies, with just three small to moderate sized pools perhaps totaling less than 0.05 acre identified in the alignment. Under the Proposed Project, these features would be spanned by lines with no direct or indirect impacts to pool hydrology, functions or values.
- Response I6-6 The commenter is referred to Master Response 4.2 for cultural resources.
- Response I6-7 The commenter expresses support for Alternative 3 and claims that a bypass around the vernal pools was not fully investigated. Please see Master Response 4.6 for information regarding Alternative 3.
- Response I6-8 The commenter expresses support for Alternative 3 with modifications. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I7, Evelyn Hodel

- Response I7-1 The commenter expresses support for Alternative 3 and claims that a bypass around the vernal pools was not fully investigated. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I8, LaVerne Hodel

- Response I8-1 The commenter expresses support for Alternative 3 and claims that a bypass around the vernal pools was not fully investigated. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I9, Barbara VanWellen

- Response I9-1 The commenter is concerned about the potential impact to their well. The commenter is referred to Master Response 4.5.
- Response I9-2 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I10, James Hitchcock

Response I10-1 The commenter is referred to Master Response 4.4.

Letter I11, William Maurer

Response I11-1 The commenter states that the Proposed Project would impact the feasibility and financial success of the planned shopping center and industrial park located in the northern portion of the City of Farmersville. The Draft EIR provides information regarding retail site development within the City of Farmersville Highway 198 Corridor Specific Plan (see page 4.9-12 and 4.9-13). As stated on page 4.9-13, top paragraph, at the time of publication of the Draft EIR, no applications to develop any specific parcel(s) had been received by the City (Miller, 2009). However, as shown in the attachments to Letter O10, from the City of Farmersville, amendments to the existing Farmersville General Plan and Highway 198 Corridor Specific Plan land use designations and zoning designations within the area traversed by the Proposed Project were approved by City Council on May 11, 2009. One parcel within the Proposed Project ROW, formerly designated under the General Plan and Highway 198 Corridor Specific Plan as *General Commercial*, was re-designated as *Highway Commercial*. Three parcels with the Proposed Project ROW, formerly zoned as *Urban Reserve* were rezoned to *Highway Commercial*, *Industrial*, and *General Commercial*.

The following text from the Draft EIR (Section 4.2, *Land Use, Planning, and Policies*) has been changed to reflect the City of Farmersville's updated land use and zoning designations since preparation of the document:

Page 4.9-10, City of Farmersville General Plan:

The Proposed Project would traverse land designated by the City of Farmersville General Plan for *Agriculture/Urban Reserve*, *Industrial*, ~~and~~ *General Commercial*, and *Highway Commercial* uses (Figure 4.9-4) (City of Farmersville, 2002; City of Farmersville, 2009).

Page 4.9-12, top paragraph:

...as determined by the City's Zoning Ordinance (City of Farmersville, 2002). The *Highway Commercial* designation is intended to provide for commercial uses that cater to the traveling public along State Route 198, such as service stations, convenience stores, restaurants and lodging establishments. As determined by the City's Zoning Ordinance, development within this designation must be landscaped, off-street parking must be provided, signs must be regulated and new

uses or extensive expansion of existing uses require review or a conditional use permit (Crumly, 2009).

Page 4.9-12, City of Farmersville Highway 198 Corridor Specific Plan:

Within the City of Farmersville’s limits, the Proposed Project would traverse the area included in the City of Farmersville Highway 198 Corridor Specific Plan, adopted on June 23, 2003 and amended on May 11, 2009, which is depicted in Figure 4.9-4 (City of Farmersville, 2003a; City of Farmersville, 2009).

Page 4.9-12, second to last paragraph:

The Proposed Project would traverse land designated as *Industrial*, ~~and~~ *General Commercial*, and *Highway Commercial*. The definitions and limitations of the *Industrial*, ~~and~~ *General Commercial*, and *Highway Commercial* land uses in the Specific Plan are the same as in the City of Farmersville General Plan, described earlier in this document.

Page 4.9-13, City of Farmersville Zoning Ordinance:

The Proposed Project would traverse land zoned by the City of Farmersville as ~~*Urban Reserve (U-R)*, *General Commercial (C-G)*, *Industrial (I)*, and *Highway Commercial (C-H)* (Crumly, 2008 City of Farmersville, 2009).~~ The ~~current~~ 2007 City of Farmersville Zoning Ordinance provides information regarding allowable uses and development standards within ~~this~~ the *General Commercial* and *Industrial* zoning designations. ~~The purpose of the *Urban Reserve* designation is to “preserve an agricultural or open space use, land suited to eventual development in other uses until such time as streets, utilities and other community facilities may be provided or programmed so as to ensure the orderly and beneficial conversion of these lands to non-agricultural use, and to provide appropriate areas for certain predominantly open uses of land which are not injurious to agricultural uses”~~ The purpose of the *General Commercial* designation is “to provide a general commercial area for the sale of commodities or the performance of services to serve the entire community.” The purpose of the *Industrial* designation is “to encourage sound industrial development by providing areas exclusively for such development subject to regulations necessary to insure [sic] the protection of adjoining uses” (City of Farmersville, 2007). The City of Farmersville implemented the *Highway Commercial* zoning designation in 2009. The purpose of the *Highway Commercial* designation is “to establish appropriate areas along Highway 198 for the development of commercial uses that cater to the traveling public, such as restaurants,

service stations, lodging, retail commercial and complementary uses. Recognizing the high-profile location of Highway Commercial properties and the city's frontage along the highway as its 'front door to the world', property development should exhibit the highest level of design quality, including architectural character, landscaping and screening" (City of Farmersville, 2009).

Pages 4.9-16 to 4.9-17:

City of Farmersville General Plan. The Proposed Project would traverse land designated by the City of Farmersville General Plan for Agriculture/Urban Reserve, Industrial, and General Commercial, and Highway Commercial uses (City of Farmersville, 2002). The General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Zoning Ordinance. The Proposed Project would traverse lands designated by the City of Farmersville Zoning Ordinance as U-R C-G, I, and C-H (Crumly, 2008; City of Farmersville, 2009). Section 17.56.0240, Table 2 of the Farmersville Zoning Ordinance specifies the conditions under which Conditional Use Permits are required for 'Communication and Public Utility Service Facilities' (City of Farmersville, 20079a). According to the Table, 'Communication and Public Utility Service Facilities' are ~~not~~ permitted in U-R C-H and C-G zones, with a conditional use permit. The zoning ordinance does not indicate whether such facilities are permitted in I zones. However, according to a City of Farmersville planning consultant, transmission lines are, in fact, allowed under certain conditions in U-R zones, and the Zoning Ordinance should be amended to list 'Communication and Public Utility Service Facilities' as consistent with the U-R designation (Schoettler, 2008). Regardless, the project applicant would, in accordance with General Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Highway 198 Corridor Specific Plan. The Proposed Project would traverse land designated by the City of Farmersville Highway 198 Corridor Specific Plan for Industrial, and General Commercial, and Highway Commercial uses (City of Farmersville, 2003b; City of Farmersville, 2009). The Specific Plan does not discuss the allowance or disallowance of transmission line

facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from the City of Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

In addition, Figure 4.9-4 has been updated to reflect the changes in land use and zoning designations, and is attached in this Response (see below).

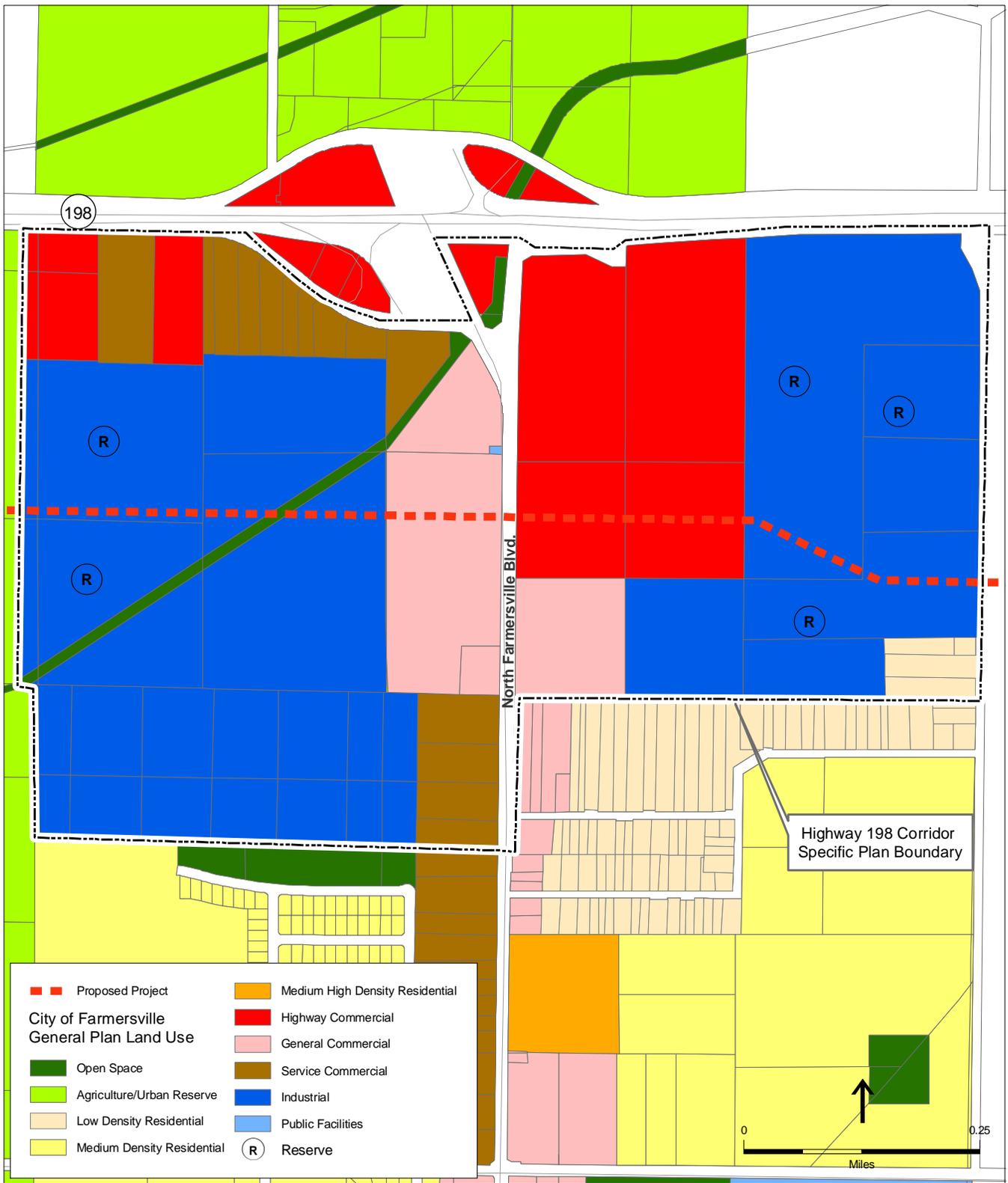
Nevertheless, the amendments to the City of Farmersville General Plan, Highway 198 Corridor Specific Plan, and zoning ordinance do not affect the feasibility of locating the Proposed Project within the planned ROW. Moreover, as of October 15, 2009, the City of Farmersville had not received any formal applications to develop any specific parcels (Crumly, 2009). Therefore, due to the speculative nature of any business park within the vicinity of the Proposed Project, potential land use conflicts are not considered.

The following references are added to Section 4.9, *Land Use Planning and Policies*:

Crumly, 2009. Sara Crumly, Management Analyst, City of Farmersville. Personal communication October 13 and 15, 2009.

City of Farmersville, 2009. Resolution 2009-56, Amendments to the General Plan Land Use Map and the Highway 198 Specific Plan Land Use Map to Implement Objectives and Policies of the 2002 Farmersville General Plan and Highway 198 Specific Plan, and to Ensure Consistency Between Land Use and Zoning Designations. Adopted May 11, 2009.

- Response I11-2 This comment requests clarification regarding total acres required for new access roads described in Chapter 2, *Project Description*. In the last paragraph on page 2-22, the Draft EIR states that the Proposed Project would require the acquisition of approximately 2.1 acres of ROW for use as access roads. This acreage represents solely access roads located *within* the ROW. Table 2-3 on page 2-24, states that the total acreage disturbed for access roads would be approximately 19.4 acres. The 19.4 acres of disturbed property represents the needed access road acreage *for the entire project*, which includes access roads located both within and outside of the ROW.
- Response I11-3 Refer to Response I11-1.
- Response I11-4 Refer to Response I11-1.
- Response I11-5 Refer to Response I11-1.



SOURCE: SCE, 2008; City of Farmersville, 2003b/2009

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.9-4
City of Farmersville General Plan Land Uses

Response I11-6 The commenter questions the location of the Kaweah Oaks Preserve. In response to this comment, the text from the Draft EIR (page 4.13-2, top of page) has been updated as follows:

Located approximately one-half mile north of the Proposed Project, Kaweah Oaks Preserve in ~~the City of Exeter~~ unincorporated Tulare County is a 324-acre property that contains the largest protected example of Great Valley oak riparian forest within the Kaweah River Delta.

Response I11-7 The commenter would like to know how wide a path was evaluated when the EIR team looked for a feasible alignment for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological Reserve (Draft EIR, page 5-7, bottom paragraph). The Draft EIR analysts evaluated the land on either side of the Alternative 3 alignment for a distance of approximately three miles, to attempt to reduce potential impacts to the Reserve. For additional information on Alternative 3 and Alternative 3A, see Master Response 4.6, and Response I79-2.

Letter I12, Barbara Ainley

Response I12-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I13, Elaine Breitbach

Response I13-1 The commenter is concerned about potential impacts to wells and the water supply (i.e., the water table). As such, the commenter is referred to Master Response 4.5 and Master Response 4.4, respectively. Further, contrary to what the commenter asserts, the particular wells to be removed (if any) have not yet been identified. Wells to be removed would be identified through the process described in Mitigation Measure 4.7-11b.

Response I13-2 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I13-3 The commenter is concerned about contracting Valley Fever from dirt spores released into the air during earth moving activities associated with construction of the Proposed Project. In response to this comment and to further clarify potential impact from fugitive dust emissions during construction, the following text is added to the Draft EIR under Impact 4.3-7 (Section 4.3, p. 4.3-23):

Fugitive dust emissions may also contain dust spores that cause coccidioidomycosis (Valley Fever). This disease is highly endemic to

the San Joaquin Valley and often results in flu-like symptoms that typically clear within a few weeks. Individuals residing, visiting or even passing through endemic areas may be exposed to the disease. Risk of infection is highly dependent on the amount of time spent outdoors and involvement in activities that expose individuals to dusty conditions (USGS, 2000).

Earth disturbing activities associated with construction of the Proposed Project and alternatives would generate fugitive dust emissions that may contain dust spores associated with Valley Fever. Dust control measures are the main defense against infection (USGS, 2000). Implementation of Mitigation Measure 4.3-1b would reduce fugitive dust thereby limiting the chance of exposure to dust spores associated with Valley Fever. Furthermore, in California, Valley Fever infection rates are typically higher during the hot summer months following winter rains between November and April (USGS, 2000). The majority of receptors that would be exposed to fugitive dust emissions would be located along the existing SCE ROW. Due to outage constraints, it is unlikely that intensive construction activities would occur within existing ROW during hot summer months, further limiting the chance of exposure to harmful dust spores.

The following reference is added to the Draft EIR (Section 4.3, page 4.3-33):

United States Geological Survey (USGS), 2000. *Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever)*, 2000.

- Response I13-4 The commenter is generally concerned about the aesthetic impacts from the placement of towers, and about the amount of productive fruit and citrus land that would be disturbed under each tower. Potential visual impacts from Alternative 2 are discussed in Section 4.1, *Aesthetics*, pages 4.1-52 to 4.1-53, and were found to be less than significant with mitigation.
- Potential impacts to Farmland from Alternative 2 are discussed in Appendix G, Section 4.2.6. The placement of poles and towers would permanently disturb approximately 25.6 acres of Farmland. This impact would be significant unmitigable.
- Response I13-5 See Response I6-5.
- Response I13-6 The commenter is referred to Master Response 4.2 for cultural resources.
- Response I13-7 The commenter expresses support for Alternative 3 and claims that a bypass around the vernal pools was not fully investigated. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I14, Alan Hiatt

- Response I14-1 The commenter expresses general opposition to Alternatives 2 and 6. Comment noted.
- Response I14-2 See Response I13-3 for text additions under Impact 4.3-7 (Section 4.3, page 4.3-7) that have been incorporated into the Draft EIR concerning the potential to contract Valley Fever from dirt spores released into the air during earth moving construction activities.
- Response I14-3 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I14-4 The commenter states that the proposed Project would result in great loss of wells and pipelines. This comment is vague and very general in scope, yet the commenter asserts that the losses would be great. Further, the commenter does not specify how such great loss would occur (i.e., why? by what mechanism?). As such, we simply disagree with this general statement and the comment cannot be addressed in any greater detail. Concerning the potential effect upon the ability to maintain existing wells, the commenter is referred to Section 4.7, Hazards and Hazardous Materials, pages 4.7-23 to 4.7-24, and to Master Response 4.5. Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.
- Response I14-5 The commenter is referred to Master Response 4.2 for cultural resources.
- Response I14-6 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I15, Richard and Bernice Marshall

- Response I15-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I16, Terrance Peltzer

- Response I16-1 The commenter is generally concerned about impacts to agricultural resources, specifically during the construction phase. Impacts to agricultural resources are discussed in Section 4.2, *Agricultural Resources*. For the Proposed Project, analyses of impacts related to construction activity are provided under Impacts 4.2-1, 4.2-2, 4.2-3, and 4.2-5. Construction-related impacts for the project alternatives are located within each alternative analysis. For the Proposed Project and all alternatives, temporary impacts

due to construction would be less than significant with mitigation, and permanent impacts of the lost Farmland acreage would be significant unmitigable.

Response I16-2 The commenter states that GHG emissions from construction are not analyzed in the Draft EIR. The commenter also claims that the EIR does not adequately address GHG issues.

Construction related GHG emissions are presented on page 4.3-25 of the Draft EIR. As noted, approximately 1,633 metric tons of CO₂e would be emitted from on- and off-road equipment associated with construction of the Proposed Project.

With regard to adequacy of the GHG analysis, the analysis provided on pages 4.3-24 through 4.3-28 of the Draft EIR provides technically sound information reasonable to support the conclusions presented in the Draft EIR.

Response I16-3 The commenter is generally concerned about the restriction of cultural practices under and around transmission lines. See Response O2-2 which addresses safety hazards pertaining to cultural practices. See Master Response 4.1 for impacts to agriculture from dust.

Response I16-4 The commenter is referred to Master Response 4.5.

Response I16-5 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I16-6 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I17, Billy and Peggy Pensar

Response I17-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3. Commenter's statements regarding the relative cost of the various alternatives are not addressed here, as cost is not a factor in the CEQA process for comparison of alternatives.

Response I17-2 The commenter states that there is a state licensed daycare facility within one-quarter mile of the Proposed Project, at 2490 Filbert Street in the City of Exeter. According to the CA State Community Care Licensing Division, three state licensed daycare (child care) facilities operate within the City of Exeter, none of which are located on Filbert Street, or in the vicinity of the Proposed Project (CCLD, 2009). An additional online search of the Yellow Pages directory and Google online maps did not locate any child care

facilities on Filbert Street (Yellowpages.com, 2009; GoogleMaps, 2009). However, even if a child care facility is located at 2490 Filbert Street in the City of Exeter, it would be approximately 0.16 mi (or ~840 feet) south of the Proposed Project. Based on the Draft EIR analysis (and most specifically Section 4.7, *Hazards and Hazardous Materials*) implementation of the Proposed Project or alternatives would not result in any substantial adverse impacts to a child care facility operating at that location.

Response I17-3 The commenter requests that the Draft EIR delineate the routes and elevations of the gravity-delivery agricultural water systems in the vicinity of the Proposed Project. The commenter is concerned that gravity-delivery agricultural water systems would be impacted by the Draft EIR's requirement that a minimum of 36 inches of cover, measured from the top of the conduit or pipe to the surface of the ground, must be maintained. The commenter is referred to Master Response 4.1.

Response I17-4 The commenter disagrees with the analysis in Section 4.9.4 (a), which states that all homes in Lemon Cove would be located on the north side of the alignment, and there are no buildings currently located to the south of the Proposed Project alignment. The commenter is correct that there are scattered buildings, including residences, located south of the Proposed Project in the vicinity of the community of Lemon Cove; however, there are no residences located south of the Proposed Project alignment within the designated urban development boundary of the community of Lemon Cove (Tulare County, 1998). To provide clarification, the following text from the Draft EIR (page 4.9-14, center of page) has been revised as follows:

However, within the urban development boundary of Lemon Cove, all homes ~~in Lemon Cove~~ would be located on the north side of the alignment; and there are no buildings currently located to the south of the Proposed Project alignment.

Letter I18, George Walton

Response I18-1 The commenter expresses support for Alternative 3. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I19, Amy Alley

Response I19-1 The commenter expresses general disapproval of the project. Comment noted.

Letter I20, Ralph Alley

Response I20-1 The commenter is generally opposed to the Proposed Project and is concerned about the potential impacts to visual resources and Native American artifacts and burial grounds, and disagrees with the need for the project given wind power and solar power technology.

The commenter is referred to the Draft EIR Section 4.1, *Aesthetics*, regarding impacts to visual resources; Section 4.5, *Cultural Resources*, regarding impacts to Native American sites; and Chapter 1, *Introduction*, pages 1-1 to 1-2 regarding project purposes and needs.

Regarding wind and solar power (i.e., renewable generation) as alternatives to the Proposed Project, the commenter is referred to the Draft EIR Chapter 3, *Alternatives and Cumulative Projects*, where the use of renewable technology to generate power was analyzed as part of the alternative screening process. These alternatives would not meet the project objectives, be feasible and avoid or reduce potential environmental effects. Therefore, renewable generation was not considered further in this EIR.

Letter I21, Chris Corbett

Response I21-1 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I21-2 The commenter is generally concerned about impacts to groundwater flow and aquifer recharge, though the mechanisms of such proposed impacts is not specified. If, in part, the comment is meant to be in reference to potential impacts to the water table, then the commenter is referred to Master Response 4.4. The aquifer underlying the project area is several hundred square miles in extent, generally hundreds to thousands of feet deep, and is contiguous with respect to the zone of saturated material (though, due to the different composition of the main water bearing units, the yield and transmissivity in any one area may vary); this statement is supported by information from DWR (2004), Croft and Gordon (1968), and Bertoldi et al. (1991). As such, based upon the information available, there is no reasonable nor plausible mechanism by which the project could impact groundwater flow. Most of the recharge to the aquifer comes from Sierra Nevada runoff (i.e., from surface channels such as the Kaweah River) and from percolation of applied irrigation water; the proposed Project would have no impact on either of these mechanisms.

Letter I22, Gary and Rebecca Davis

Response I22-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I23, Jacob Deitz

Response I23-1 The comment is noted. However, this comment does not concern the accuracy or adequacy of the Draft EIR.

Response I23-2 The commenter expresses support for Alternative 3A. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Response I23-3 The commenter is referred to Master Response 4.6 for a discussion of alternatives.

Letter I24, Melissa Deitz

Response I24-1 The commenter expresses support for Alternative 3 primarily because of less impact to people, wildlife, and sacred land. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.2 for information on cultural resources.

Letter I25, Joseph Ferrara

Response I25-1 The commenter is concerned about the feasibility of Mitigation Measures 4.7-11a and 4.7-11b, specifically that it would not be possible to relocate existing wells (if necessary) such that the yield at the new location is at least equivalent to the yield at the existing location. Though the aquifer underlying the project area is several hundred square miles in extent, it is recognized that, due to the different composition of the main water bearing units, the yield and transmissivity in any one area may vary. It is also recognized that well yields in the areas that the commenter refers to may be relatively low compared to other areas. The commenter is referred to Master Response 4.5 concerning the issue of replacement well productivity (i.e., in the event that a particular wells would need to be relocated).

Response I25-2 The commenter is concerned about impacts to irrigation infrastructure and the feasibility of having to relocate existing wells (if necessary). Concerning potential well relocation, the commenter is referred to Master Response 4.5. Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

- Response I25-3 The commenter is concerned about potential impacts to the Exeter Irrigation District's distribution system, as well as the lack of a description of this particular distribution system. Some of the larger irrigation canals within the project area are described in Section 4.8, Hydrology and Water Quality, page 4.8-3. Describing the infrastructure of all the irrigation districts within the project area is not necessary for, and is beyond the scope of, the Environmental Setting presented in Section 4.8, *Hydrology and Water Quality*. Concerning general impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.
- Response I25-4 The commenter is concerned that wells adjacent or in close proximity to the proposed ROW would also be subject to Impact 4.7-11 (i.e., induced currents and safety of well-related equipment operation). Wells outside of the proposed ROW would be beyond the State certified working clearances described in Section 4.7, *Hazards and Hazardous Materials*, page 4.7-23, and, therefore, there would be no potential impact.
- Response I25-5 The commenter feels a complete review of the hydrology of the area east and northeast of Exeter, and a detailed description of the allowable maintenance work within the proposed ROW, should be included in the EIR. Further, the commenter feels that a number of local irrigation districts should be consulted with respect to potential impacts to infrastructure and operations. The environmental setting (which includes information on hydrology) presented in Section 4.8, *Hydrology and Water Quality*, pages 4.8-1 through 4.8-5 is adequate for the purpose of satisfying the requirements of CEQA and applicable to the Project area. With respect to potential hazards, particular maintenance activities that may be of concern are described and discussed in Section 4.7, *Hazards and Hazardous Materials*, and in Response O2-2.
- Response I25-6 The commenter's list of references is noted.
- Response I25-7 The commenter expresses support for Alternative 3, as modified by the PACE comments, because it would adhere to the Garamendi Principles. Please see Master Response 4.6 for information regarding Alternative 3 and the Garamendi Principles.
- Response I25-8 The table and data presented by the commenter are noted.

Letter I26, Joyce Frazier

- Response I26-1 The commenter questions why the impacts to vernal pool habitat can be mitigated for Alternative 2 but not for Alternative 3. The substantial presence of sensitive vernal pool habitat in and near the Alternative 3 alignment contributed to the identification of Class I impacts for the alternative that are

not present on Alternative 2. As stated in Response I6-5, the Alternative 2 alignment spans several small vernal pools for which pool functions and values would not be directly impacted. While the Alternative 2 alignment would avoid and span pools that provide potential habitat for listed species, the Alternative 3 alignment would directly impact several acres of vernal pools that are known to support listed species. Structures would be created within pools under Alternative 3, and could cause substantial impacts to the Stone Corral Ecological Reserve.

Access roads would be provided to each structure as a component of the selected alternative. Under Alternative 2, access roads would not traverse or disturb vernal pool habitat, as the area already supports some roads and access routes are available though relatively non-sensitive areas. For Alternative 3, the proposed access roads at Stone Corral Ecological Reserve would permanently eliminate several acres of sensitive vernal pool habitat.

As discussed in Master Response 4.6 (Alternatives), several factors severely limit the ability to simply route the powerline alignment around the Stone Corral Ecological Reserve, including the presence of residential development in the area surrounding the reserve and how the route would bisect agricultural and residential parcels.

- Response I26-2 The commenter encourages the California Public Utilities Commission (CPUC), in its decision making process, to reconsider the importance of each impact area and reach a conclusion that does result in adoption of Alternative 2, particularly for agricultural reasons. Comment noted.
- Response I26-3 The commenter is referred to Master Response 4.3 (EMF).
- Response I26-4 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture and human life. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I27, Jose Luis and Rose Ann Gutierrez

- Response I27-1 The commenter states that the proposed Project would put the local water supply in great jeopardy and that vital wells would be removed. This comment is vague and very general in scope, yet the commenter asserts that the impact would be great. Further, the commenter does not specify how the local water supply would be placed in such great jeopardy (i.e., why? by what mechanism?). As such, we simply disagree with this general statement and the comment cannot be addressed in any greater detail. Further, contrary to what the commenter asserts, the particular wells to be removed (if any) have not yet been identified. Wells to be removed would be identified

through the process described in Mitigation Measure 4.7-11b. The commenter is also referred to Master Response 4.5 concerning the issue of replacement well productivity (i.e., in the event that a particular wells) would need to be relocated).

Response I27-2 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I27-3 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I28, Terri Hacobian

Response I28-1 The commenter is referred to Master Response 4.7 (Non-CEQA).

Letter I29, Nancy Hamlin

Response I29-1 The commenter expresses support for Alternative 3A. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I30, Bob Hengst

Response I30-1 The commenter is concerned about potential impacts to wells and irrigation pipelines. Contrary to what the commenter asserts, the particular wells to be removed (if any) have not yet been identified. Wells to be removed would be identified through the process described in Mitigation Measure 4.7-11b. The commenter is also referred to Master Response 4.5 concerning the issue of replacement wells and well productivity (i.e., in the event that a particular well(s) would need to be relocated), and Master Response 4.1 concerning impacts to irrigation systems.

Response I30-2 The commenter is generally concerned about impacts to agricultural resources, specifically the removal of orange trees and the construction of access roads on his property. The commenter is referred to Appendix G, which provides the Final EIR analysis of impacts to agriculture, including citrus. Regarding impacts related to construction of access roads, see general discussion of construction related impacts in Section 4.1, *Air Quality*, Section 4.2, *Agricultural Resources*, Section 4.6, *Geology, Soils, Seismicity, and Mineral Resources*, Section 4.8, *Hydrology and Water Quality*, Section 4.10, *Noise*, and Section 4.14, *Transportation and Traffic*.

Response I30-3 The commenter expresses support for Alternative 3A primarily for agricultural reasons. This comment does not identify any new issues that

were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I31, David Hengst

- Response I31-1 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I31-2 For discussion related to induced currents and electrical shocks that would be associated with operation of the Proposed Project, see the Impact 4.7-11 discussion on Draft EIR pages 4.7-23 and 4.7-24. As disclosed in the Draft EIR, impacts related to electric shocks would be mitigated to a less than significant level through implementation of Mitigation Measures 4.7-11a and 4.7-11b.

The commenter expresses concern that liability insurance may become unaffordable and lines of credit may be hard to secure due to risks associated with electric shocks. This comment is speculative as no information is provided by the commenter to substantiate the concern.

The commenter also claims that the CPUC should not authorize the route through farmland because the project description indicates that automobile vehicle parking land uses in the ROW would be reviewed on a case-by-case basis. The CPUC does not see a nexus between the need for permission to park under the line and CPUC approval of the project.

- Response I31-3 The commenter expresses support for Alternative 3A for agricultural and biological reasons, and concern about the economic effects of the other alternatives. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A, and Master Response 4.7 regarding economic concerns.

Letter I32, Foster Hengst

- Response I32-1 The commenter states that if Alternatives 2 or 6 is selected, the Foothill Bible Christian Service Brigade will no longer be able to use the land for outdoor activities. Continued use of this area for recreational purposes would not be precluded by implementation of the Proposed Project.

Letter I33, Linda Hengst

- Response I33-1 The commenter is referred to Master Response 4.2 for cultural resources.

Response I33-2 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I34, Tammi Hitchcock

Response I34-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture and to groundwater. Please see Master Response 4.6 for information regarding Alternative 3, and Master Responses 4.4 and 4.5 for information regarding groundwater and wells.

Letter I35, Tom and Jennifer Logan

Response I35-1 The commenter expresses several objections to Alternative 1. It should be noted here that Alternative 1 is not identified as the Environmentally Superior Alternative in the Draft EIR. The commenter's specific objections to Alternative 1 and responses to those objections are as follows:

- *300 property owners affected and several homes have to be demolished.* It is acknowledged in the Draft EIR that Alternative 1 (also called the Proposed Project) would require right-of-way acquisition from approximately 300 separate landowners. However, only one home would have to be removed as disclosed on page 2-22 of the Draft EIR.
- *Impact to 5,000 acres of agricultural land.* Appendix G, which provides the Final EIR analysis of impacts to agriculture, quantifies the amount of agricultural land that would be temporarily or permanently disturbed as a result of Alternative 1. Table 4.2-3 shows that there are only 231 total acres of farmland in the entire ROW for Alternative 1, not 5,000 acres as suggested by the commenter.
- *Property values will decrease.* Please see Master Response 4.7 for information regarding property values.
- *Schools and Commercial development will be affected.* The commenter did not provide details on any specific schools or commercial development that would be impacted by Alternative 1, so it is assumed here that the commenter is making a general comment referring to the impacts already disclosed in Draft EIR Section 4.9, *Land Use, Planning, and Policies*, and Section 4.12, *Public Services*.
- *Views from Highway 198 will affect tourism.* The scenic corridor status of Highway 198, and the potential aesthetic impacts of Alternative 1, are described in Draft EIR Section 4.1, *Aesthetics*. Please see Master Response 4.7 for information regarding economic impacts to tourism.
- *Seven cities/areas will be affected.* The commenter did not provide details on any specific impacts to cities/areas as a result of

Alternative 1, so it is assumed here that the commenter is making a general comment referring to the impacts already disclosed in Draft EIR Section 4.9, *Land Use, Planning, and Policies*, Section 4.12, *Public Services*, and Section 4.15, *Utilities and Service Systems*.

- *Environmental impact will be tremendous.* The commenter suggests that the entire ROW would be clear-cut, which would not be the case; the total amount of permanent and temporarily disturbed acreage is summarized in Table 2-5 in Draft EIR Section 2, *Project Description*. The commenter provides a list of both common and special status species that the commenter claims will be displaced by Alternative 1. The commenter is referred to Draft EIR Section 4.3, *Biological Resources*, for a complete discussion of the sensitive resources present in the Alternative 1 ROW and the potential impacts to those resources.

Response I35-2 The commenter identifies several perceived safety issues that would be associated with the project. The issues and brief responses are as follows:

- *Hazards from mist.* It is not clear how mist from spraying activities could cause death or serious injury. High power transmission lines in the Central Valley are inundated with mist-like conditions each year due to meteorological conditions such as the Tule Fog and other forms of precipitation. To the CPUC's knowledge, none of these conditions have resulted in injury or death to people in the vicinity of transmission lines.
- *Pacemakers.* The risk in the vicinity of the transmission line to individuals with pace makers is disclosed on Draft EIR page 4.7-22 under Impact 4.7-10. The commenter's concern is noted.
- *EMF.* See Appendix B in the Draft EIR for information associated with EMF research related to cancer. Also see Master Response 4.3.
- *Unauthorized ROW Access.* As identified in the Draft EIR Section 2.7.1.2 on page 2-25, unauthorized vehicular access on new access and spur roads that would be developed for the project would be controlled by the installation of gates at fenced property lines. Regarding whether SCE would defend and indemnify for possible legal costs, that issue would presumably have to be resolved between SCE and the individual property owners during ROW agreement negotiations and is not a matter for consideration in the CEQA analysis.

Response I35-3 The commenter states that some power lines seem to have a natural attraction for certain insects which then migrate to fruit trees. For example, dust from bare ground can attract mites, which are hard to control. Several U.S. Department of Agriculture technical publications cite that bare soils below orchards can be a source of dust mites, as orchard traffic stirs up dust that gets into the tree canopy. Vegetation clearing from beneath the proposed lines will not be required as part of the proposed project. Thus, additional

dust sources beyond those already present are not anticipated as a result of the proposed project.

Response I35-4 The commenter expresses support for Alternative 3 and concern about loss of farm property resulting in job loss. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.7 regarding issues outside the scope of CEQA, including loss of jobs. Please see Master Response 4.6 regarding Alternative 3.

Response I35-5 The commenter is concerned about land being taken out of the Williamson Act. The commenter is referred to Appendix G, which provides the Final EIR analysis of impacts to agriculture. As stated under Impact 4.2-3, Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use. The placement of transmission poles/towers on land currently under Williamson Act contracts would not disqualify the land from its eligibility for Williamson Act contract status. Thus, there would be a less than significant impact related to the ROW properties' compatibility with the Williamson Act. Furthermore, many agricultural uses would continue to be permitted within the ROW.

Response I35-6 The commenter is referred to Master Response 4.6 for a discussion of alternatives.

Response I35-7 The commenter notes that graffiti is a constant problem in rural areas and wants to know if SCE would be responsible for keeping graffiti off of poles and towers. Graffiti, like any other vandalism or damage to an SCE structure, should be reported to SCE for resolution or repair.

Response I35-8 It is the commenter's opinion that SCE prefers the Proposed Project to help power the Visalia, Tulare and Hanford areas, and the commenter would like to know why SCE does not build a power plant in that area. The commenter is referred to the analysis provide in Chapter 3, *Alternatives and Cumulative Projects*, page 3-4 which states "while several routing configuration were show to help alleviate the power flow constrains, only loop configurations (i.e., looping the under-utilized Big Creek-Springville 220 kV lines into the Rector Substation) would also result in a meaningful improvement in system strength). Therefore, building power plants in other areas would not meet the basic project objectives and were not considered as feasible alternatives to the Proposed Project.

The commenter doubts that SCE will fully disclose all information on the proposed routes, and declares that SCE has in effect stated that special status species get more consideration than humans. The CPUC hires an independent consultant to review and determine adequacy of all information provided by SCE to the CPUC. If it is determined that information is not adequate, the

CPUC can require SCE to provide more information and/or have its environmental consultant gather the required information. CEQA evaluates numerous different environmental resources areas to comprehensively disclose potential impacts to the physical environment - including resource areas pertinent to both the human and the natural environment.

- Response I35-9 The commenter is concerned that wells near power lines will no longer be able to be serviced and questions why the issue of well location was not addressed in the EIR. The potential hazards posed by the Project with respect to well maintenance activities and the proximity of existing wells to the Project ROW are addressed in Section 4.7, *Hazards and Hazardous Materials*, pages 4.7-23 through 4.7-24. Also, the commenter is referred to Master Response 4.5.
- Response I35-10 The comment, which expresses support for Alternative 3A and requests that CPUC hold a public hearing in the project area, is noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I36, Leroy and Sandy Maloy

- Response I36-1 The commenter is concerned about impacts to groundwater flow and, subsequently, to existing wells. The commenter is referred to Master Response 4.4.

Letter I37, George McEwen

- Response I37-1 The commenter expresses the opinion that the simulations in Figures 4.1-7b and 4.1-11b are inaccurate and should be corrected, and that impacts to State Route 198 would be significant. The commenter also questions the validity of the simulations because they were done by SCE.

SCE performed neither the visual analysis nor the visual simulations. Although, SCE coordinated the development of the Background Aesthetics Report, the simulations were created by Environmental Vision.

Environmental Vision specializes in design consulting services to represent the aesthetics and public perceptions of environmentally sensitive projects. As stated in Section 7, *Report Preparers*, ESA performed the visual impact analysis for the Draft EIR, Section 4.1, *Aesthetics*.

As discussed in Appendix I of the PEA, the simulations by Environmental Vision illustrate the location, scale and appearance of the Proposed Project as seen from representative public viewpoints. The viewpoints and visual simulations used for the visual analysis are shown in Figure 4.1-1. Consistent with standard procedures for transmission projects, Environmental Vision

employed computer modeling and rendering techniques to produce the visual simulation images. An initial digital model was developed using GIS and engineering data with digital aerial photographs supplied by SCE. Design data and GIS project data provided by SCE were also used to develop three-dimensional models of the proposed transmission poles and towers. To create a complete computer model of the Proposed Project, the three-dimensional computer model of the proposed transmission facilities was combined with the digital site model (SCE, 2008).

For each of the simulation viewpoints, viewer location was digitized from topographic maps using five feet as the assumed eye level. Computer “wire frame” perspective plots were then overlaid on photographs of the key observation points to verify scale and viewpoint location. Digital visual simulations were then produced based on computer renderings of the 3-D model, combined with digital versions of the selected site photographs (SCE, 2008).

Visual resource experts at ESA reviewed the simulations for the Draft EIR analysis, and verified that the visual simulations are presented in a manner that clearly and reasonably depicts the location, scale and general appearance of the project as seen within its landscape context. For purposes of CEQA visual impact assessment, the visual simulations provide technically sound and reasonable support for the conclusions presented in the Draft EIR.

- Response I37-2 The commenter is concerned about soil compaction during construction and requests more specific details how SCE will implement Mitigation Measure 4.2-1a. As stated in the Draft EIR (pages 4.2-11 to 4.2-12), Mitigation Measure 4.2-1a would require, among other measures, that SCE monitor pre-construction soil densities and return the surface soil to within five percent of original density, and rip the top soil layers to achieve the appropriate soil density where necessary. The exact techniques SCE uses to achieve required soil density are outside the scope of CEQA. See also Response O24-54.
- Response I37-3 The commenter is concerned about the feasibility of relocating wells (if necessary). The commenter is referred to Master Response 4.5.
- Response I37-4 The comment, which expresses support for Alternative 3A for agricultural and biological reasons, is noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I38, John Pehrson

Response I38-1 The commenter feels that the Draft EIR treats the loss of prime agricultural land as less important than saving a biological resource (vernal pools), and recommends contacting the Department of Conservation. Commenter is referred to Chapter 5, *Comparison of Alternatives*, where impacts to all resource areas for each alternative were considered in making a determination of the Environmentally Superior Alternative. Regarding consultation with the Department of Conservation, the agency has reviewed and submitted comments on the Draft EIR (See Comment Letter O31).

Letter I39, Barbara Peltzer

Response I39-1 The commenter is concerned about the feasibility of having to relocate water lines and wells (if necessary), and whether new locations would be as productive as existing well locations. Concerning the potential relocation of existing wells, the commenter is referred to Section 4.7, Hazards and Hazardous Materials, pages 4.7-23 to 4.7-24, and to Master Response 4.5. Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

Letter I40, Larry Peltzer

Response I40-1 The commenter states that the Draft EIR does not adequately address impacts to agricultural resources. This comment does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR.

The commenter is also concerned that the EIR does not take into consideration cultural practices for agriculture. For potential impacts to agricultural cultural practices, see Response O2-2.

Response I40-2 The commenter is concerned about impacts to agricultural resources during the construction phase. See Response I16-1.

Response I40-3 The commenter states that the EIR does not adequately account for the impact of construction GHGs or for the removal of trees that scrub the air of CO₂.

Page 4.3-25 of the Draft EIR states that approximately 1,633 metric tons of CO₂e would be emitted from on- and off-road equipment associated with construction of the Proposed Project. Impacts from removal of trees are addressed on page 4.3-27 through 4.3-28 of the Draft EIR. The analysis provides technically sound information and appropriate mitigation to support conclusions presented in the Draft EIR.

- Response I40-4 The commenter is concerned about impacts to irrigation and the feasibility of relocating wells. The commenter is referred to Master Response 4.5 concerning the issue of relocation and replacement of existing wells (i.e., if necessary). Concerning impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.
- Response I40-5 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I40-6 The commenter is referred to Master Response 4.6 for a discussion of alternatives.
- Response I40-7 The commenter expresses the opinion that even though the health risk associated with electric and magnetic fields (EMF) is unclear, selection of Route 3 would be advantageous for reducing exposure to EMF. Comment noted. Also refer to Master Response 4.3 on EMF.
- Response I40-8 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture. The commenter also notes that a “work around” to avoid the sensitive biological resources present in the Alternative 3 ROW has been identified by PACE. Please see Master Response 4.6 for information regarding Alternative 3.
- Response I40-9 The commenter is referred to Master Response 4.6 for a discussion of alternatives.

Letter I41, Sarah Peltzer

- Response I41-1 The comment states general concerns regarding impacts to agricultural resources and support for Alternative 3, and requests that future generations of farming families be taken into consideration. Comment noted. Impacts to agricultural resources are discussed in Appendix G, which provides the Final EIR analysis of impacts to agriculture. This comment does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR.

Letter I42, Karen Redfield

- Response I42-1 The commenter is concerned about potential impacts to groundwater flow and availability. The commenter is referred to Master Response 4.4.

Letter I43, Randy Redfield

- Response I43-1 The commenter is concerned about the potential impacts to groundwater flow and the feasibility of replacing and relocating existing wells (if necessary). The commenter is referred to Master Responses 4.4 and 4.5.
- Response I43-2 The commenter is referred to Master Response 4.2 (Cultural Resources).
- Response I43-3 The commenter is referred to Master Response 4.2 (Cultural Resources).
- Response I43-4 The commenter expresses support for Alternative 3A. See Master Response 4.6.

Letter I44, Del Strange

- Response I44-1 The commenter expresses support for Alternative 3 and lists data and information from the Draft EIR to support the assertion that Alternative 3, with a slight modification to avoid vernal pool habitat, is superior to Alternative 2. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I45, Gary and Colene Tarbell

- Response I45-1 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture and because it would adhere to the Garamendi Principles. Please see Master Response 4.6 for information regarding Alternative 3. The commenter also raised the issue of lowered property values. Please see Master Response 4.7 for information regarding property values.

Letter I46, Van Dellen (Lubbert)

- Response I46-1 The comment states general concerns regarding impacts to agricultural resources. For potential impacts to cultural practices, see Response O2-2. For potential impacts to agricultural wells and underground aquifers, see Master Responses 4.4 and 4.5. For potential impacts to irrigation systems, see Master Response 4.1.
- Response I46-2 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I46-3 The commenter is referred to Master Response 4.2 for cultural resources.
- Response I46-4 The commenter is referred to Master Response 4.7 (Non-CEQA).

- Response I46-5 The commenter expresses general concern for farm worker safety under the lines. For discussion related to safety associated with cardiac pacemakers and electrical shock, refer to the Draft EIR Impact 4.7-10 and Impact 4.7-11 discussions on pages 4.7-22 through 4.7-24. For issues related to health risks associated with electric and magnetic fields, see Master Response 4.3 on EMF.
- Response I46-6 The commenter expresses support for Alternative 3, modified slightly to avoid sensitive vernal pools, primarily because of less impact to agriculture and scenic resources. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I47, Van Dellen (Nancy)

- Response I47-1 The comment states general concerns regarding impacts to agricultural resources. For potential impacts to cultural practices, see Response O2-2. For potential impacts to agricultural wells and underground aquifers, see Master Response 4.5. For potential impacts to irrigation systems, see Master Response 4.1.
- Response I47-2 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I47-3 The commenter is referred to Master Response 4.2 for cultural resources.
- Response I47-4 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I47-5 See Response I46-5, above.
- Response I47-6 The commenter expresses support for Alternative 3, modified slightly to avoid sensitive vernal pools, primarily because of less impact to agriculture and scenic resources. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I48, Van Dellen (Wayne)

- Response I48-1 The commenter is generally opposed to Alternatives 2 and 6. Comment noted.

Letter I49, James Canterbury

- Response I49-1 The commenter expresses general support for Alternative 3. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I50, Kent and Gail Kaufuss

- Response I50-1 The commenter expresses disappointment with the organization of the Public Comment Meeting, held in Visalia on July 23, 2009. Specifically, the commenter was disappointed with the amount of staff, the number and set-up of sign-in stations, and that meeting attendees waiting in line did so outside in the heat. The commenter also expresses disappointment that there was not a staff member present at the rear of the room at all times, to accept comment letters and guard letters already submitted. Comments noted.
- Response I50-2 The commenter expresses concern that the Alternative 1 ROW would isolate part of the commenter's property and that compensation from SCE might not be adequate for the loss. Monetary details of ROW compensation are not within the scope of the CEQA process, and so no response is provided for that matter. The commenter also expresses support for Alternative 3, primarily because of fewer environmental impacts compared to Alternative 1. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I51, Douglas and Kaye Rydberg

- Response I51-1 The commenter states that the Draft EIR does not adequately address groundwater impacts. The commenter is referred to Master Response 4.4.
- Response I51-2 The commenter is opposed to Alternatives 2 and 6 as they believe these alternatives would adversely affect land values, pristine agricultural lands, associated agricultural infrastructure, and cultural resources. See Master Response 4.7 for issues outside the scope of CEQA, including issues related to property value. For impacts to visual resources, see Section 4.1, *Aesthetics*; for impacts to farmland, see Appendix G, which provides the Final EIR analysis of impacts to agriculture; for impacts to Native American and early pioneer historical sites, see Section 4.5, *Cultural Resources*.
- Response I51-3 The commenter is referred to Master Response 4.6 for a discussion of alternatives.
- Response I51-4 The commenter is referred to Master Response 4.6 for a discussion of alternatives.
- Response I51-5 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture and groundwater wells. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.5 for information regarding groundwater wells. The commenter also restates a finding from the Draft EIR that replacement of the old Rector line would reduce EMF in that ROW; comment noted.

Letter I52, Cheryl Turner

Response I52-1 The commenter expresses general support for Alternative 3 in favor of Alternatives 1 or 2. The commenter incorrectly asserts that Alternative 3 would not take out permanent crops. Impacts to crops and farmland for each of the alternatives are described in Draft EIR Section 4.2, *Agricultural Resources*. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I53, Stacy Kelch

Response I53-1 The commenter expresses general support for Alternative 3 over Alternative 1. Please see Master Response 4.6 for information regarding Alternative 3.

Response I53-2 Draft EIR Impact 4.7-10 has been supplemented as follows to address implantable defibrillators.

Impact 4.7-10: Electric fields associated with the operation of the Proposed Project could affect cardiac pacemakers and implantable defibrillators, resulting in ventricular fibrillation. *Less than significant (Class III)*

The following paragraphs have been added to the Impact 4.7-10 discussion before the last paragraph on Draft EIR page 4.7-22.

The electric field associated with the proposed new transmission lines may also be of sufficient magnitude to impact operation of implanted defibrillators. For defibrillators, the inability to sense normal endogenous electrical activity, due to interference from external fields, could be interpreted by the unit as a state of fibrillation, leading to an inappropriate discharge that the wearer may sense as a “jolt” (or alternatively, it could lead to withholding a needed discharge for some period of time). An inappropriate defibrillating pulse occurring at a particular time called the “vulnerable” period in the cardiac cycle could itself trigger ventricular fibrillation. For the most part, these defibrillator anomalies are reversible, with the devices returning to normal operation upon removal of the electrical interference. The magnetic field threshold for interference with defibrillators is about 2 G or higher and depending on the unit and based on design characteristics, it is anticipated that the electric field threshold for defibrillators would be above 2 kV/m (EPRI, 1997).

As with pacemakers, the precise coincidence of an individual to be exposed to high electric fields within the transmission line ROW and a

biological need of that individual for the full function of his/her defibrillator would appear, in general, to be a rare event.

The last paragraph under the Impact 4.7-10 discussion on Draft EIR page 4.7-22 has been modified as follows.

Given the rarity of an exposure event to occur simultaneously with a biological need for full function pacemakers or defibrillators, it would be unlikely that the transmission line's electric field would cause a harmful interference to the operations of implanted cardiac devices; therefore, impacts would be less than significant.

- Response I53-3 The commenter expresses support for proceeding with Alternative Route 3 instead of the Proposed Project (Route 1) due to potential health risks associated with working and residing in close proximity to high transmission lines and the higher population densities along Route 1 compared to Alternative Route 3. The commenter is referred to the Master Response 4.3 on EMF.
- Response I53-4 The commenter expresses support for Alternative 3 primarily because of less impact to agriculture and people, and because it would adhere to the Garamendi Principles. Please see Master Response 4.6 for information regarding Alternative 3. The commenter also restates a finding from the Draft EIR that replacement of the old Rector line would reduce EMF in that ROW; comment noted.
- Response I53-5 The commenter expresses the opinion that the land and business impacts to the City of Farmersville were not adequately addressed in the Draft EIR. The Draft EIR, Section 4.9, *Land Use, Planning and Policies* evaluated the potential land use impacts to Farmersville and other cities in the area of the Project. However, as discussed in the Draft EIR and Response O10-8, the California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. The CEQA relevance of economic impacts to local land owners and businesses are address in Master Response 4.7 - Non-CEQA issues.
- Response I53-6 The commenter expresses support for Alternative 3, with modifications to avoid sensitive vernal pools, because of general concerns about the local economy and community. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.7 for information regarding economic issues.

Letter I54, Jay and Nancy Culter

- Response I54-1 The commenter disagrees with the Draft EIR’s findings that aesthetic impacts would be less than significant with mitigation. The commenter states that the visual impacts in close proximity to the transmission lines (i.e., less than one-quarter of a mile) would be significant as the new structures would dominant the views. The commenter also asserts that lower land values for properties near transmission lines further support their point. See Response to Comment I68-1 for additional discussion of the visual impact methodology used for the analysis in Section 4.1, *Aesthetics*. The relationship between property values and the proposed project is discussed in Master Response 4.7 – Non CEQA Issues.
- Response I54-2 The commenter expressed concerns that the calculation methodology used for estimating the agricultural impacts from the maintenance buffers surrounding poles and towers had underestimated the lost Farmland area. The commenter has misinterpreted the analysis’s application of the “smaller footprint” in the impact determination. When calculating total acres disturbed by the Proposed Project and alternatives, the Draft EIR analysts assumed a 50-foot maintenance buffer surrounding each new pole and tower, consistent with SCE policies (see Section 4.2, *Agricultural Resources*, page 4.2-12, bottom paragraph). For the Final EIR, the analysts assumed a 50-foot maintenance buffer surrounding poles, and a 100-foot maintenance buffer surrounding towers, per SCE’s comment in letter O24 (see Response O24-56). This calculation assumes future enforcement of SCE policies related to required clearance for maintenance activities. However, for the existing lattice structures, EIR analysts noted that agricultural crops currently occupy what should be the maintenance areas around the lattice structures. Therefore, when calculating the acres underneath existing lattice towers that could be reclaimed as Farmland upon tower removal, EIR analysts took a conservative approach and assumed that only the actual footprint of the existing lattice structures could be reclaimed as Farmland. Therefore, the analyses of permanent impacts do not need to be modified.
- Response I54-3 The commenter is concerned about potential impacts to groundwater flow through bedrock fractures. The commenter is referred to Master Response 4.4.
- Response I54-4 The commenter is concerned about the feasibility of relocating wells (if necessary). The commenter is referred to Master Response 4.5.
- Response I54-5 The commenter is concerned about potential impacts to irrigation lines and the feasibility of relocating irrigation infrastructure. The commenter is referred to Master Response 4.1.

Response I54-6 The commenter is concerned about the indirect costs associated with loss of Farmland, including costs associated with water infrastructure relocation and other temporary impacts. Regarding irrigation infrastructure, see Master Response 4.1. Regarding economic impacts, see Master Response 4.7.

Letter I55, B. Davis

Response I55-1 The commenter expresses support for Alternative 3 because it would be the least obtrusive route. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I56, Lindsay Turner

Response I56-1 The commenter supports Alternative 3. Comment noted.

Letter I57, Delia Garza

Response I57-1 The commenter supports Alternative 2 and is opposed to the Proposed Project, citing concerns about the potential impact to Kaweah Oaks Preserve and native birds. The commenter is referred to Section 4.1, *Aesthetics*, Section 4.4, *Biological Resources*, and Section 4.13, *Recreation*, which addressed visual, biological and recreational impacts on Kaweah Oaks Preserve and were found to be less than significant or no impact. See Section 4.4, *Biological Resources*, page 4.4-35, for information about impacts to birds which were also found to be less than significant with mitigation.

Letter I58, Rhonda Montgomery

Response I58-1 The commenter is generally opposed to Alternative 2, citing concerns regarding impacts to local farms, ranches and animals as well as to the local economy. The commenter is referred to Appendix G, which provides the Final EIR analysis of impacts to agriculture; Section 4.4, *Biological Resources*; and Master Response 4.7 for issues outside the scope of CEQA, including impacts to the local economy.

Letter I59, Jack and Kathy Pendley

Response I59-1 The commenter expresses support for Alternative 3 because it would avoid construction the transmission line along Highway 198 (Alternative 1). It should be noted that Alternative 1 is not identified in the Draft EIR as the Environmentally Superior Alternative. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I60, Doyle Ritchie

Response I60-1 The commenter expresses support for Alternative 3 primarily because Alternative 2 would potentially affect a water well and other agricultural resources on the commenter's ranch. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.5 for information regarding groundwater wells.

Letter I61, Cliff Ronk

Response I61-1 The commenter expresses support for Alternative 3 primarily because it would utilize existing easements as much as possible. Please see Master Response 4.6 for information regarding Alternative 3. The commenter also questions whether experimental technology, such as beaming solar energy down to Earth from satellites, is possible. At the present time, such technologies have not been developed to the point where they could provide a feasible alternative to the Proposed Project.

Letter I62, Connie Sing

Response I62-1 The commenter expresses general support for Alternative 3 over Alternative 1 primarily because of the potential for Alternative 1 to adversely impact the City of Farmersville. It should be noted that Alternative 1 is not identified in the Draft EIR as the Environmentally Superior Alternative. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I63, Patricia Whitendale and family

Response I63-1 The commenter describes a project alternative that would replace the existing towers in the existing Big Creek-Rector ROW with new towers/poles and construct the proposed new transmission line for the entire length of the ROW between the Rector Substation and the Big Creek 3 generating station, rather than construct any portion of the proposed new transmission line across the valley. As described in Section 3.2.1 on page 3-4 of the Draft EIR, only a cross-valley loop would meet the basic project objectives. The alternative described by the commenter does not meet the basic project objectives. See also Master Response 4.6 for a discussion of alternatives.

Response I63-2 The commenter takes issue with the comments of others who claim that the new poles in the existing ROW would have a negative visual impact. The commenter expresses support for Alternative 3 primarily because replacing the old towers with fewer, taller poles would result in a safer more open area that could be landscaped for walking paths, etc. The commenter also asserts

that the Draft EIR is misleading when it states that Alternative 3 would pass within 300 feet of approximately 214 residences, because those residences are already within 300 feet of the existing line. Page 4.9-3 of the Draft EIR correctly states that “Alternative 3 would pass within 300 feet of approximately 214 residences along the existing ROW but would not pass within 300 feet of any residences along the new ROW.”

- Response I63-3 The commenter states that the Draft EIR is misleading in that it states that approximately 95 percent of Alternative 3 would cross lands designated as *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland*, *Farmland of Local Importance*, and *Grazing* without noting that most of the lands affected are already crossed by existing ROW. Numerous places in the Draft EIR note that the first 14.6 miles of Alternative 3 would be located in existing SCE ROW. Noting this in the Alternative 3 analysis in Section 4.2, *Agricultural Resources*, of the Draft EIR would not change the impact analysis. The Final EIR (Appendix G) found that in total, preparation of work areas and pull and tension sites for Alternative 3 would temporarily reduce the amount of Farmland by approximately 85.0 acres which would be approximately 34.3 more acres than the Proposed Project. Construction of Alternative 3 would result in a total permanent conversion of approximately 18.2 acres of land designated as Farmland which would be approximately 13.7 acres less than Proposed Project.
- Response I63-4 It is the commenter’s opinion that grazing land cannot be compared to farmland containing mature orchards and/or is in production and that analysis underestimates the potential lost Farmland acreage. The commenter’s opinion is consistent with the analysis in the Appendix G, which provides the Final EIR analysis of impacts to agriculture. As stated in Subsection 4.2.2 Significance Criteria, the project would result in a significant impact if it converted *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance*, collectively referred to as ‘Farmland,’ to non-agricultural use. Conversion of *Grazing* land is not considered significant, and disturbed acres of *Grazing* land are provided for informational purposes only (see Subsection 4.2.4 Impacts and Mitigation Measures, Approach to Analysis, first paragraph). For a response addressing the concerns that the Draft EIR analysis underestimates the lost Farmland acreage see the Response to I75-2.
- Response I63-5 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I63-6 The commenter identifies that there are significant habitat protection, restoration and enhancement opportunities on lands that were obtained by the Kaweah Delta Water Conservation District. The significance criteria from CEQA Appendix G guidelines were used to determine potential project impacts to conservation lands. As proposed, the identified Alternative 1

alignment does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan. Additionally, the Alternative 1 alignment would not substantially alter existing conditions on these lands with regard to habitat types, wetlands, or site suitability to support special status plants or wildlife. Site opportunities for habitat protection, and site restoration and enhancement would remain following project implementation.

- Response I63-7 The commenter expresses support for Alternative 3, with modifications to avoid the vernal pools in the Stone Corral Ecological Reserve. Please see Master Response 4.6 for information regarding Alternative 3.
- Response I63-8 The commenter asserts that the portion of Alternative 3 where it crosses over Stokes Mountain could provide a beneficial use as a firebreak or emergency vehicle access in the event of a wildland fire. This possible use of the Alternative 3 ROW was not proposed by SCE as part of its CPCN application to the CPUC, and so was not evaluated in the Draft EIR.
- Response I63-9 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I63-10 The commenter expresses support for Alternative 3A. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I64, Lenora Graves

- Response I64-1 The commenter expresses support for Alternative 3 primarily because of less impact to agricultural resources than the other alternatives and because it would not pass near the community of Elderwood. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I65, Bowe and Brenda McMahon

- Response I65-1 The commenter expresses support for Alternative 3A and opposition to Alternative 2, primarily for aesthetic reasons. This comment does not identify any new issues that were not addressed in the Draft EIR. Comment noted. Please see Master Response 4.6 for information regarding Alternative 3A.

Letter I66, William Pensar

- Response I66-1 The comment describes the environmental and fiscal benefits of using ROW in the Alternative 3 alignment, and expresses support for Alternative 3A. This comment does not identify any new issues that were not addressed in

the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Response I66-2 The commenter states that the Draft EIR does not adequately analyze indirect impacts from loss of retail land in the City of Farmersville. The commenter believes that the Proposed Project would make the last convenient parcel of land undesirable for a major food retailer and would result in local residents traveling farther to acquire food at competitive prices, thereby resulting in higher GHG emissions.

At the time of writing of the Draft EIR no applications had been submitted to develop the parcel that the commenter appears to be referencing. While it is noted that the Proposed Project may bisect the preferred parcel for future development of a retail site, it is speculative to state that the Proposed Project would render the site undesirable and would eliminate the potential for the City to develop a major food retailer. Furthermore, if it is assumed that local residents currently travel to neighboring communities to purchase groceries, these emissions would be considered part of the environmental baseline and therefore would not be attributed to the Proposed Project under CEQA.

Response I66-3 The comment expresses support for Alternative 3A for reasons related to cumulative impacts. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3A.

Response I66-4 The commenter claims that there is a state licensed daycare facility within one-quarter mile of the Proposed Project, at 2490 Filbert Street in the City of Exeter. See Response I17-2.

Response I66-5 The commenter is concerned about potential impacts to gravity-delivered agricultural water systems, and the feasibility of covering irrigation infrastructure in the ROW. The commenter is referred to Master Response 4.1.

Response I66-6 The commenter states that there are homes located to the south of the Proposed Project in the community of Lemon Cove. Please see Response I17-4.

Letter I67, Joe Sing

Response I67-1 The commenter expresses support for Alternative 3 primarily because of fewer impacts to agricultural resources and aesthetics compared to the other alternatives, and because it would maximize utilization of the existing ROW. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I68, Tony Calcagno

- Response I68-1 The commenter feels that visual impacts from the Proposed Project would be much greater than the Alternatives because of its longer ROW, and inquires whether the Draft EIR preparers used a matrix or formula to evaluate aesthetic impacts. The commenter is referred to Draft EIR, Section 4.1, *Aesthetics*, Table 4.1-3: Guidelines for Determining Adverse Visual Impact Significance (page 4.1-25). As explained in the document, the determination of impact significance is based on both visual sensitivity of the location (as shown in Table 4.1-2, page 4.1-20), and the degree of visual change that the project would cause (explained on pages 4.1-24 and 4.1-25). For example, SR 198 has moderate-high visual sensitivity because of its status as an eligible State scenic highway and high number of motorists who use the road. The Proposed Project would create a moderate-to-high visual contrast. Therefore, according to Table 4.1-3, impacts would be adverse and potentially significant. However, implementation of Mitigation Measures 4.1-1a and 4.1-1b would require additional structure design specifications as well as the use of non-specular and non-reflective materials that would reduce visual impacts from SR 198 to a less than significant level.
- Response I68-2 The commenter states that the Draft EIR lacks a chart showing a graph of the height of the existing poles in the area compared with the proposed new poles and towers. The commenter is referred to the Draft EIR, Chapter 2, *Project Description*, Figure 2-4: Replacement of Single Circuit 220 kV Structures with Double Circuit 220 kV Structures; Figure 2-5: Transmission Structures to be Located 1.1 miles north of Rector Substation; and Figure 2-6: Structures for Proposed Project, on pages 2-18, 2-19, and 2-21, respectively. These figures provide diagrams of existing towers to be removed as well as proposed new towers and poles. The commenter is also referred to the visual simulations of the Proposed Project in Figures 4.1-3 through 4.1-13 on pages 4.1-27 through 4.1-37 which show the existing and proposed transmission poles and lines in the context of representative viewpoints.
- Response I68-3 The commenter is concerned that the visual simulations of the new utility facilities such as Figure 4.1-3b are incorrect, and that the true height of the poles is not captured. See Response I37-1.
- Response I68-4 The commenter questions the absence of visual simulations for residential communities, such as Badger Hill. As explained in Section 4.1, *Aesthetics* (page 4.1-1), land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual setting conditions. For the study area, potentially sensitive land uses include major transportation routes such as designated scenic highways and roads, and designated park, recreation and natural areas. As a result, sensitive viewer groups were

developed in Section 4.1, *Aesthetics*, using locations with views of these potentially sensitive land uses, where a moderate to high number of viewers has access to the views. For the analysis, this included: motorists on scenic or eligible scenic roads (SR 198); motorists along moderately and highly traveled roads (SR 65, SR 245, SR 201, and SR 216); and visitors to recreational areas (Kaweah Oaks Preserve and Cutler Park). Visual simulations were developed for these and other representative locations.

Views from residential communities are considered private views, not public views and as such their visual sensitivity is considered low because the number of viewers would be low. The number of viewers from Badger Hill Estates would be particularly low, because the community is gated and not open to the public. The EIR used generally accepted significance criteria and standards for the visual impact analysis. Under these significance standards, the Proposed Project's impacts on private views in the project area would not be considered to be environmentally significant. This standard is consistent with court findings in *Mira Mar Mobile Community v. City of Oceanside* (2004), which state that such a standard may be adopted and used in an EIR, but may not be used as a bar to the initial preparation of an EIR (ELN, 2005). Consequently, visual simulations were not specifically prepared from the perspective of local private residential communities. However, impacts to private residences are analyzed under Impact 4.1-5. The commenter is referred to pages 4.1-45 through 4.1-46, Local Roadways and Private Residents. The impacts were determined to be less than significant.

Response I68-5

The commenter disagrees with the determination in Table 5-2 (page 5-4) that that impacts from the Proposed Project would be similar to the alternatives. The commenter is disappointed that the Draft EIR does not indicate a preference based on relative aesthetic impacts of the Proposed Project and alternatives. The commenter also questioned the absence of a systematic approach to the visual impact analysis and recognition of the public opposition and comments from the November 2008 public meeting.

Contrary to the commenter's statement, the Draft EIR's "No Preference" determination was not based on the idea that all alignments necessarily have an equal magnitude of visual impact. Instead, the "No Preference" determination is based on the analysis' findings that impacts for the Proposed Project and alternatives were all determined to be less than significance with mitigation.

For concerns regarding the impacts to Farmland, the commenter is referred to Section 4.2, *Agricultural Resources*. Regarding the commenter's desire for a formula, matrix or scale to evaluate impacts to visual resources, see Response 168-1 and Table 4.1-3 in the Draft EIR. Regarding comments

received at the Public Participation hearing held in November of 2008, this hearing was part of the CPUC's Certificate of Public Convenience and Necessity (CPCN) process, which is separate from the CEQA process. CPCN comments are not included in the Draft EIR, which is a CEQA document. Comments for the CEQA process were gathered at two scoping meetings, held on September 17 and 18, 2008. These comments, along with comments received via email, mail, or fax, were categorized and published in the San Joaquin Cross Valley Loop Scoping Report, in October of 2008 and are included as Appendix A of the Draft EIR.

Letter I69, Diane Heaton

Response I69-1 The commenter is generally opposed to the Proposed Project and in support of Alternative 3A. See Master Response 4.7 for issues outside the scope of CEQA, and Master Response 4.3 for information regarding EMF.

Letter I70, Joel Heaton

Response I70-1 The commenter expresses general opposition to the project and suggests that City of Visalia needs to do a better job in planned growth mapping and pathways for utilities. This comment does not identify any new issues that were not addressed in the Draft EIR. The commenter also suggests that SCE put money into upgrading their existing lines heading north from the Rector Substation. Please see Master Response 4.6 for information regarding upgrading existing lines. The commenter also claims that the vernal pools and sensitive species present in the Stone Corral Ecological Reserve have coexisted with the transmission lines for more than 20 years, so they wouldn't be harmed by installation of a new line. Please see Response O13-1 for information regarding potential impacts to the vernal pools within the Stone Corral Ecological Reserve.

Letter I71, Dale Kersten

Response I71-1 The commenter is concerned about the aesthetic impacts to SR 198, and from Badger Hill. It is the commenter's opinion that the views from these locations would be "destroyed" and consequently maintains that Alternative 1 is an unacceptable alternative irrespective of any development cost implications. The commenter is referred to Section 4.1, *Aesthetics*, which analyzes impacts to SR 198 and finds that impacts are less than significant with mitigation. Regarding impacts to views from Badger Hill, the commenter is referred to Response I68-4.

Letter I72, Trudy Wischemann

- Response I72-1 The commenter states that the term ‘visual resources’ should include historical and cultural considerations. The commenter also provides extensive information asserting the area’s historical and cultural resource value. The commenter asserts that the aesthetics analysis’s findings of “less than significant impacts” are incorrect due to the failure to include consideration of the area’s historical and cultural significance.
- The Draft EIR (Section 4.5, *Cultural Resources*, page 4.5-16) identified and evaluated the cultural resources of the area’s agricultural landscape, inclusive of all the orchard land on the valley floor as well as the historic resources throughout the general vicinity of the Proposed Project and alternatives. Impacts to cultural resources were also analyzed in Section 4.5.
- Response I72-2 The commenter appears to disagree with the Draft EIR’s conclusion that safety hazards to aerial spray applicators have been adequately mitigated to a less than significant level and suggests that the analysis should include a discussion related to cost of lives. As disclosed in the Impact 4.7-6 discussion on Draft EIR page 4.7-18, the potentially significant hazard to aerial spray applicators is based on pilots that may have no previous knowledge that a new transmission line and towers have been constructed, which would create an increased danger for those pilots. Implementation of Mitigation Measure 4.7-6 would ensure pilot notification of the new transmission line, thereby reducing the danger for the pilots to a less than significant level.
- Although a cost of lives analysis was not conducted for the Proposed Project or alternatives, the Draft EIR includes a qualitative analysis that ranks the alternatives compared to the Proposed Project. The analysis focused on distance of lines in agricultural areas. It was determined that the Proposed Project would have the highest hazard to aerial applicator pilots compared to the other route alternatives (see Draft EIR Section 4.7.6).
- Response I72-3 The commenter is concerned about the potential impacts dewatering (groundwater) may have upon local farms and families. Considering the substantial size and depth of the groundwater aquifer in this area, dewatering boreholes (which would be temporary and shallow) would have no impact on groundwater resources currently being used by local farmers.
- Response I72-4 The commenter states that the Draft EIR does not adequately address cumulative impacts of the Proposed Project to agricultural resources but does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR. A cumulative analysis of potential impacts to agricultural resources is addressed in the Draft EIR, Section 4.2,

Agricultural Resources, and in the Final EIR Appendix G, which provides the Final EIR analysis of impacts to agriculture.

Response I72-5 The commenter expresses an opinion that the No Project analysis is inadequate because the commenter believes there would be beneficial impacts if SCE were not allowed to build the project. The commenter is referred to Draft EIR Section 5.4, *No Project Alternative vs. the Environmentally Superior Alternative*, which states that “[u]nder the No Project alternative, the Proposed Project would not be built and would therefore have no environmental impacts related to project construction and maintenance.” However, it is also noted in that section that not building the proposed project would jeopardize SCE’s ability to provide safe and reliable electric service to customers within the Electrical Needs Area, and would subject residents and businesses to the potential for increased incidence of brown-outs and black-outs, which could have an adverse impact to the provision of public services. For this reason, the No Project alternative was not selected as the Environmentally Superior Alternative.

Response I72-6 This comment asserts that the Draft EIR is incorrect that project would not cause growth, especially Route 1 (Proposed Project) as it would make it easier to sell power to the planned community Yokohl Ranch. Commenter believed that Route 4 was dismissed because the Boswell Corporation (proponents of Yokohl Ranch) opposed that alternative.

The commenter is referred to the analysis provide in Chapter 3, *Alternatives and Cumulative Projects*, page 3-4 which states that the most basic project objectives that need to be met to provide safe and reliable electric service in the Electrical Needs Areas are: (1) to substantially improve power flow capabilities, and (2) to substantially improve system strength. “While several routing configuration were shown to help alleviate the power flow constraint, only loop configurations (i.e., looping the under-utilized Big Creek-Springville 220 kV lines into the Rector Substation) would also result in a meaningful improvement in system strength.” As discussed on page 3-7, Alternative 4 did not meet the most basic project objectives and as such was not carried forward for full analysis in the EIR.

Letter I73, Suzanne Bidwell

Response I73-1 The commenter expresses support for Alternative 3 primarily because Alternative 2 would be very close to her home and would ruin the views, and her property value would be adversely affected. Potential impacts to aesthetics for Alternative 2 are discussed in Draft EIR Section 4.1, *Aesthetics*. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.7 for information regarding property values.

Letter I74, Lorene Clark

Response I74-1 The commenter expresses general support for Alternative 3, modified slightly to avoid the sensitive vernal pools. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I75, James Gordon

Response I75-1 The commenter is concerned about potential impacts to irrigation lines and the feasibility of relocating wells (if necessary). Concerning the potential relocation of wells, the commenter is referred to Master Response 4.5. The commenter is concerned about potential impacts to irrigation infrastructure. The commenter is referred to Master Response 4.1.

Response I75-2 The commenter expresses the opinion that the number of agricultural acres that would be disturbed was underestimated in Table 4.2-4 to Table 4.2-11 in the Draft EIR, Section 4.2, *Agricultural Resources*, because of project-related restrictions on farm equipment use, irrigation system operations and maintenance, and removal of existing “wagon wheel” wells. Restriction on the use of farm equipment and irrigation system maintenance equipment in the ROW, though adverse, would not convert Farmland to non-agricultural use. As such, it would not result in temporarily or disturbed acreage. Safety issues pertaining to irrigation maintenance equipment are addressed in Section 4.7, *Hazards and Hazardous Materials*, and in Response O2-2. With implementation of Mitigation Measures 4.7-11a and 4.7-11b, impacts related to electric shocks from well maintenance would be reduced to less than significant. For potential impacts to agricultural wells and underground aquifers, see Master Response 4.5.

Response I75-3 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I75-4 The commenter is concerned about the potential impacts to irrigation infrastructure and the feasibility of relocating an existing well (if necessary). With respect to potential well relocation, the commenter is referred to Master Response 4.5. Concerning general impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

The commenter also notes that much of the built water system within the Project Area is historic, including ditches built by the Lemon Cove Ditch Company, Wallace Ranch Water Company, Rocky Hill Ditch, Exeter Irrigation District, and Stone Corral Irrigation District. The commenter notes that many of these facilities are buried and recommends that impacts to these ditches should be considered.

The commenter is referred to Draft EIR Section 4.5.1, *Methods and Results* (pages 4.5-11 through 4.5-17), which summarize the archival and field studies undertaken in support of the project. As described in Section 4.5.1, an Archaeological Survey Report (Armstrong and Jackson, 2008) was prepared that consisted of a records search at the Southern San Joaquin Valley Information Center (of the California Historical Resources Information System), literature review, Native American contact, and field reconnaissance. The Draft EIR lists the cultural resources identified during the records search and field visits for each alternative, including many agricultural ditches and canals. Any built historic resource that was observed during the course of the survey, including canals and ditches, was recorded by surveyors. The Draft EIR includes Mitigation Measures 4.5-2a (creation of a Historic Properties Treatment Plan for impacted historic resources) to mitigate impacts to known resources.

As the commenter notes, it is possible that many agricultural water conveyance features were either built to operate underground, or have been buried over the course of time, and as such may not have been visible during the field study for the Archaeological Survey Report. Mitigation Measures 4.5-2b (additional cultural resources survey) and 4.5-4b (cease work if cultural resources are uncovered during project implementation) address the inadvertent discovery of cultural resources during project construction.

Response I75-5 The commenter expresses the opinion that the Draft EIR analysis of visual resource impacts is biased due to its finding that the visual quality from the SR 198/65 intersection is indistinctive and industrial primarily because of existing SCE substation facilities. The commenter is correct that the visual quality of this location is considered indistinctive and industrial because of the existing substation. Irrespectively, the visual impact analysis in Section 4.1, *Aesthetics*, must consider the Proposed Project in terms of how it would alter the existing viewshed, and how it relates to the current visual context. As such, it is appropriate to consider the existing substation facilities in determining the significance of the Project's changes to the visual setting.

Response I75-6 The commenter's opinion that impacts to SR 198 would be significant is acknowledged. The Draft EIR (Section 4.1, *Aesthetics*, pages 4.1-38 to 4.1-40) found that potential impacts to SR 198, an eligible State scenic highway, were less than significant with implementation of Mitigation Measures 4.1-1a (Treat Surfaces with Appropriate Colors, Finishes, and Textures), and 4.1-1b (Use of Non-Specular and Non-Reflective Materials).

Response I75-7 This commenter states that the Draft EIR is misleading because it does not make it clear that the Proposed Project would require two new crossings of SR 198 in addition to an existing ROW crossing. However, the Draft EIR

clearly states in Section 4.1, *Aesthetics*, on page 4.1-38 that “the Proposed Project would be located parallel to, but approximately 0.45 mile distant from, SR 198 for approximately 9.2 miles. The proposed alignment would also cross SR 198 twice, near mile 10 and mile 16.5.” Furthermore, the Proposed Project’s alignment is clearly shown (with Highway 198 demarcated) in Figure 4.1-1 in Section 4.1, *Aesthetics*, and numerous other Figures throughout the Draft EIR.

- Response I75-8 The commenter states that the loss of citrus crop would result in lost income as well as resulting adverse impacts to local communities and local farming industry. The commenter’s opinion is consistent with the analysis in the Draft EIR, Section 4.2, *Agricultural Resources*. As stated in Subsection 4.2.2 Significance Criteria (page 4.2-9), the project would result in a significant impact if it converted *Prime Farmland, Unique Farmland, or Farmland of Statewide Importance*, collectively referred to as ‘Farmland,’ to non-agricultural use. Consequently, the projected loss of 16.2 acres of existing citrus orchard under the preferred alternative is considered a significant and unavoidable impact (see Appendix G, which provides the Final EIR analysis of impacts to agriculture). See Master Response 4.7 (Non-CEQA) for issues outside the scope of CEQA, including economic and employment impacts.
- Response I75-9 The commenter is concerned about impacts to the viewshed of the foothills and Sierra Nevada, and considers the two new 220 kV crossings of SR 198 highly disruptive. See Section 4.1, *Aesthetics*, for discussion of the Proposed Project’s impacts to the area’s visual resources. The Draft EIR analysis determined that the impact to the area’s visual resources from the Proposed Project and the alternatives would be less than significant with mitigation.
- Response I75-10 The commenter expresses that opinion that the projected lost Farmland acreages are underestimated and the project would induce growth in residential or commercial use as small parcels would be economically unfeasible for farming. The commenter provides no specific support for their opinion that the lost Farmland estimates are too low. Also see Master Response 4.7 (Non-CEQA) for issues outside the scope of CEQA, including economic impacts of lost Farmland.
- Response I75-11 The commenter expresses the opinion that the Draft EIR does not adequately address the need for the Big Creek 2-Rector and Big Creek 3-Rector lines to be updated. The Draft EIR, in the Executive Summary on page ES-3 and ES-5, identifies both SCE’s objectives for the San Joaquin Cross Valley Loop Transmission Project, as well as the basic objectives for the Proposed Project determined by the EIR team. Addressing the future need to replace the Big Creek 2-Rector and Big Creek 3-Rector lines is outside the scope of this CEQA document. As a result, it is not addressed in the Draft EIR.

- Response I75-12 The comment, which recommends three mitigation measures to minimize impacts to agricultural land, is acknowledged. See Master Response 4.1 (Agricultural Issues) for additional clarification on impacts to existing irrigation systems.
- Response I75-13 The commenter expresses support for Alternative 3, with modifications to avoid the sensitive vernal pools near Seville. The commenter lists several reasons for supporting Alternative 3, most of which are merely restatements of findings from the Draft EIR. Other issues raised by the commenter include an overall reduction of cost for maintaining the ROW, and lower adverse economic impact for Alternative 3. Maintenance costs are not considered in the CEQA process, but may be considered by the CPUC in the CPCN process. Please see Master Response 4.7 for information regarding economic impacts, and Master Response 4.6 for information regarding Alternative 3.
- Response I75-14 The commenter requests that the analysis for the Proposed Project include the number of permanent jobs that may be lost by the removal of orchards, the potential cost to the public of providing income support and worker retraining, and the potential decrease in tourism to the City of Exeter and its associated loss of revenue and sales tax. Regarding economic and socio-economic impacts resulting from the Proposed Project, see Master Response 4.7.

Letter I76, Mary Gordon

- Response I76-1 This comment, which states that the Proposed Project would add to the industrial nature of some areas resulting in a cumulative aesthetic impact, is acknowledged. The aesthetic cumulative analysis in the Draft EIR (Section 4.1, *Aesthetics*, page 4.1-52) agrees with the commenter that the Proposed Project would contribute to cumulative adverse visual influences where aboveground facilities or evidence of underground facilities (e.g., cleared ROW) occupy the same field of view as other built facilities or impacted landscapes currently in the viewsheds of sensitive viewers. Existing utility infrastructure (described in the impact analysis above), including transmission lines and substations, have compromised the existing visual setting in the project vicinity. However, the Proposed Project, along with the past, present, and reasonably foreseeable projects, would not create a cumulatively significant effect because together these visual influences would not dominate the landscape setting.
- Response I76-2 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I76-3 The commenter is referred to Master Response 4.2 for cultural resources.

- Response I76-4 The commenter expresses the opinion that transmission towers and lines are growth-inducing where they cross or parallel small parcels. Comment noted.
- Response I76-5 The commenter recommends the creation of an Agricultural Advisory Committee, as proposed by the Tulare County Farm Bureau and the California Farm Bureau Federation. The commenter is referred to Response O20-19.
- Response I76-6 The commenter expresses general support for Alternative 3, with modifications to avoid the sensitive vernal pools near Seville, primarily because it would follow existing rights of way, have would less impacts to agriculture resources, cultural resources and community values. Please see Master Response 4.6 for information regarding Alternative 3 and Master Response 4.2 for cultural resources. Community values are not a CEQA issue but may be considered by the CPUC in making its decision on the project in the CPCN process.

Letter I77, Courtney Hengst

- Response I77-1 The commenter is referred to Master Response 4.2 for cultural resources.

Letter I78, Hayley Hengst

- Response I78-1 The commenter expresses general support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because of concern over impacts to agricultural resources. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I79, John O. and Shirley B. Kirkpatrick

- Response I79-1 The commenter expresses support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because it would avoid creating a new ROW. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.
- Response I79-2 The commenter questions the analysis behind an ESA memorandum by Brian Pitman (dated July 9, 2009) that analyzed three proposed alignments (3A, 3B and 3C) that would direct Alignment 3 around the Stone Corral Ecological Reserve. The analysis was performed to identify the nearest reasonable and available alternatives to the proposed Alignment 3. Each of the alternatives encountered either residential dwellings or potential biological resource issues that made them either infeasible or similar in impact to Alternative 3. Because direct ground access was not available for

alignment reviews, Alignments 3B and 3C were reviewed using remote data, aerial photographs, and best available scientific information referenced in the Draft EIR. Because direct ground access to these routes was not available during the appropriate survey seasons, the analysis presumed the presence of special status species and wetlands if habitat appeared suitable to support such resources (this approach is typical for CEQA biological resources analyses). In the absence of in-season field surveys for wetlands and special status species and inherent uncertainties in the best available scientific data (e.g., California Natural Diversity Database species distribution maps), this approach tends to overestimate the range of sensitive plant and wildlife resources.

The commenter questions what specific lands support sensitive habitat to make rerouting infeasible. The July 9, 2009 memorandum identifies the location of areas with potential biological resource constraints.

With regard to the commenter's second question (what specific properties have building improvements to make rerouting not feasible?); there are numerous residences near each of the alignments that make them infeasible. In selecting the presented alignments, it was not possible to eliminate the presence of residences by shifting the alignments further west (for Alignment 3A) or east (Alignment 3C).

Numerous other alternatives near Alignments 3B and 3C were screened out during the analysis because the aerial photo examination showed extensive wetland signatures, which are indicative of potential presence of listed plants and wildlife. In summary, the commenter is correct that the analysis failed to identify a feasible rerouting alternative, principally because the lands located around Stone Corral Ecological Reserve present their own significant constraints.

Response I79-3 The commenter is concerned about the potential impacts to irrigation infrastructure and the feasibility of relocating an existing well (if necessary). With respect to potential well relocation, the commenter is referred to Master Response 4.5. Concerning general impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

Response I79-4 The commenter expresses the opinion that Mitigation Measure 4.2-1b would be ineffective, because the citrus growing season is year round. As stated in the Draft EIR, Section 4.2, *Agricultural Resources* (page 4.2-11), implementation of Mitigation Measures 4.2-1a and 4.2-1b will ensure the continued and future productive use of Farmland in the project area once construction is completed. Irrespective of the citrus crop year-round growing season, the disturbance to citrus due to site preparation would be considered temporary in nature and would not result in the conversion of farmland to

non-agricultural use. Therefore, impacts would remain less than significant with mitigation (see also Appendix G, which provides the Final EIR analysis of impacts to agriculture).

- Response I79-5 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I79-6 The commenters are concerned about the accuracy of the visual simulations, particularly the simulation in Figure 4.1-11b, and provide their own visual simulation from the same location. Regarding the accuracy of visual simulations, the commenters are referred to Response I37-1.
- Response I79-7 The commenters argue that the view from their home is distinctive and would be highly impacted, and provide visual simulations of the Proposed Project as seen from their deck. Comment noted. The commenter is referred to Response I68-4 in regards to views from private residences.

Letter I80, McKenzie Family

- Response I80-1 The commenter expresses general support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because it would have less impact to farmland and the Hengst Farms in particular. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I81, Arturo Ramirez

- Response I81-1 The commenter is concerned about potential impacts to groundwater. The commenter is referred to Master Response 4.4.

Letter I82, Lynette Ramirez

- Response I82-1 The commenter would like to receive notification if/when their orchard property would be affected by construction. SCE would be required to coordinate and provide notice to affected landowners prior to commencing any construction related activities.

The commenter would also like information on how the project would affect farming operations, and regarding the exact location of the proposed poles. Potential impacts to agriculture are discussed in Section 4.2, *Agricultural Resources* (see also Appendix G of the Final EIR, which provides the Final EIR analysis of impacts to agriculture). Regarding pole location, the commenter is referred to Chapter 2, *Project Description*, Figure 2-3a, which shows the location of existing and replacement structures in the ROW of the

Proposed Project, as well as Appendix C of the Draft EIR, which shows the same information for the project alternatives.

- Response I82-2 This comment expresses support for Alternative 3 and opposition to Alternative 2 due to potential adverse economic impacts to the commenter's existing farming operations under Alternative 2. See Master Response 4.7 for issues outside the scope of CEQA, including impacts to property values.

Letter I83, Hudson Rose

- Response I83-1 The comment expresses opposition to Alternative 2 due to potential impacts from noise, and damage to human and livestock health, and underground aquifers. As indicated in the Draft EIR Section 4.10, *Noise*, pages 4.10-20 to 4.10-21, noise impacts from the construction of Alternative 2 were determined to be less than significant with mitigation, and impacts from operations were determined to be less than significant. For an analysis of health impacts, the commenter is referred to Section 4.7, *Hazards and Hazardous Materials*, as well as Master Response 4.7, which addresses issues outside the scope of CEQA, and Master Response 4.3, which addresses EMF. For potential impacts to agricultural wells and underground aquifers, see Master Response 4.5.

Letter I84, Corky and Laura Wynn

- Response I84-1 The commenter expresses general support for Alternative 3 and discounts the value of the vernal pools. Please see Master Response 4.6 for information regarding Alternative 3 and Response O13-1 for information regarding potential impacts to the vernal pools within the Stone Corral Ecological Reserve.

Letter I85, Scott Belknap

- Response I85-1 The commenter correctly notes that the minimum sag height for conductors will be 32 feet above ground. The commenter describes the equipment his pump company uses, and expresses concern about the risk of operating equipment within 100 feet of the proposed conductors. The commenter is referred to Section 4.7, *Hazards and Hazardous Materials*, which discusses potential safety risks associated with operating equipment near the transmission lines.
- Response I85-2 The commenter expresses concerns about the indirect economic impacts resulting from the Proposed Project and alternatives, and supports Alternative 3 primarily for agricultural reasons. Regarding economic impacts, the commenter is referred to Master Response 4.7 (Non-CEQA). Regarding Alternative 3, the commenter is referred to Master Response 4.6 (Alternatives).

Letter I86, DeLeondaris Family

Response I86-1 The commenter expresses general support for Alternative 3. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I87, Bill Ferry

Response I87-1 The commenter is concerned about potential impacts to aquifers and groundwater flow. The commenter is referred to Master Response 4.4.

Response I87-2 The commenter is referred to Master Response 4.7 (Non-CEQA).

Response I87-3 The commenter expresses general support for Alternative 3, primarily because it would have less impact to agricultural resources and livelihood. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I88, James Jordon

Response I88-1 The commenter is opposed to Alternatives 2 and 6 due to potential impacts to agricultural resources, and requests information on how farmers should operate their farms during and after construction. This information is outside the scope of CEQA, and is therefore not addressed in the Draft EIR. Regarding mitigation measures to offset impacts to Farmland, the commenter is referred to Section 4.2, *Agricultural Resources*. As stated in the Draft EIR, for the Proposed Project and all alternatives, temporary impacts to Farmland are less than significant with mitigation, and permanent impacts are significant unmitigable. For potential impacts to agricultural wells and underground aquifers, see Master Response 4.5. For potential impacts to irrigation systems, see Master Response 4.1.

Letter I89, Robert Bennett Lea III

Response I89-1 The commenter expresses general support for Alternative 3, primarily because of concerns regarding impacts to aesthetics, farming livelihood, property values, and exposure to EMF. Please see Master Response 4.6 for information regarding Alternative 3, Master Response 4.7 for information regarding property values, and Master Response 4.3 for information regarding EMF.

Letter I90, Gus Marroquin

Response I90-1 The commenter expresses general support for Alternative 3, primarily because of less impact to agricultural resources and jobs. Please see Master Response 4.6 for information regarding Alternative 3, and Master Response 4.7 for information regarding economics and job loss. The commenter also mentions the loss of farms and jobs due to water shortages in the western part of the valley, which is unrelated to the Proposed Project.

Letter I91, Mike Olmos (Representing City of Visalia)

Response I91-1 The City of Visalia is concerned that the proposed facilities and transmission lines will be visible from a higher number of homes and properties, and from a greater distance, which would create significant impacts to new areas. The commenter is correct that, due to the increased height of poles and towers and because all alternatives involve at least some new ROW, the new facilities will be visible to more residents and visitors than under current conditions. However, as discussed in the Draft EIR, Section 4.1, *Aesthetics*, impacts to visual resources were analyzed and determined to be less than significant, or less than significant with mitigation.

Response I91-2 The City of Visalia is generally concerned that raising the height of structures in the existing ROW will significantly degrade the view of the Sierra Nevada for the local community. This comment does not state a specific concern or question regarding a significant environmental impact or the adequacy of the Draft EIR. The Draft EIR, Section 4.1, *Aesthetics*, provides an analysis of visual impacts for the Proposed Project and all alternatives, including views of the Sierra Nevada. Impacts were determined to be less than significant with mitigation.

Response I91-3 The commenter claims that the Proposed Project and alternatives would create an obstacle to community planning in the City of Visalia, as well as neighborhood quality. The commenter is referred to Draft EIR Section 4.9, *Land Use, Planning and Policies*. The Draft EIR concluded that the Proposed Project and the alternatives would not physically divide an established community, conflict with applicable land use plans, policies or regulations, or conflict with any applicable habitat conservation plan or natural community conservation plan. It should also be noted that the existing transmission line has been in operation since the early 1910's. The existing community due west near Rector Substation was constructed up to the existing ROW much later in time. Furthermore, the City of Visalia was fully aware of the existing transmission line ROW throughout its development of its General Plan.

Response I91-4 The commenter is concerned that the increased intensification of facilities within the ROW will impact the planned City of Visalia regional sports park, a 100-acre site located approximately 0.5 miles east of the existing SCE ROW. The Draft EIR acknowledges this future community park in the Proposed Project's cumulative scenario in Chapter 3, *Alternatives and Cumulative Projects* (page 3-33) and Section 4.13, *Recreation* (page 4.13-2). Like the Proposed Project, the alternatives would not contain a residential component that would result in an increased use of recreational facilities, nor include or require the construction or expansion of recreational facilities. All potential recreation impacts resulting from temporary construction activities, including temporary increase in noise and dust, decreased air quality from construction vehicles, odors from construction equipment, safety issues, loss of vegetation, and access issues are analyzed in the corresponding sections of the Draft EIR (see Sections 4.1, *Aesthetics*; 4.3, *Air Quality*; 4.4, *Biological Resources*; 4.10, *Noise*; and 4.14, *Transportation and Traffic*). All these project related impacts were found to be less than significant relative to the portion of the project area in the vicinity of the planned City of Visalia regional sports park. Therefore, implementation of a project alternative is not reasonably expected to result in a significant change to future recreational use at the planned City of Visalia regional sports park.

Response I91-5 The City of Visalia is concerned that the power line easement will create a “no-man’s land” within an existing urban environment, and provides a list of ways to mitigate visual and land use impacts such as treescapes, urban gardens, and play fields. The Draft EIR (Section 4.9, *Land Use, Planning and Policies*) found that impacts to land uses in Visalia, and other cities and communities in the project area, would be less than significant. Therefore, there is not a sufficient nexus to warrant implementation of any land use mitigation measures. For impacts to visual resources, the Draft EIR (Section 4.1, *Aesthetics*) determined that Mitigation Measures 4.1-1a (Treat Surfaces with Appropriate Colors, Finishes, and Textures), 4.1-1b (Use of Non-Specular and Non-Reflexive Materials), 4.1-2 (Reduce Visibility of Staging Areas), 4.1-3 (Placement of Pulling/Splicing Equipment), and 4.1-6 (Reduce Construction Night Lighting Impacts) were sufficient to reduce impacts from construction and operation to less than significant.

Letter I92, Alex Peltzer (Representing City of Visalia)

Response I92-1 The comment, which expresses the opinion that the urban-related impacts of the proposed Project are significantly different from any of the alternatives, is acknowledged. The commenter asserts the validity of their conclusion based on the fact that “the urban areas affected by the Proposed Project are significantly different from any of the alternatives.” This assertion is misfounded. CEQA generally evaluates the nature and magnitude of resource

impacts to determine if they represent “significant” or “less than significant” changes to the physical environment. Consequently, per CEQA methodology, two impacts can be the same in terms of their CEQA significance if the intensity of the impacts are both “less than significant” even if the nature or cause of their resources impacts may be different. Furthermore, it is also in fact very possible that different circumstances can result in very similar resource impacts. Traffic and air quality impacts are two examples of urban-related resource areas in which the significance measures are relatively “agnostic” to the specific circumstances underlying the projected outcomes.

Response I92-2

The commenter expresses the opinion that urban-related impacts were not adequately addressed in the Draft EIR. The commenter specifically identifies Aesthetics, Land Use, Noise, Transportation and Traffic as well as Population and Housing as CEQA topics where, in their opinion, insufficient analysis was provided to support the Draft EIR’s impact conclusions for the City of Visalia. The commenter also expressed the opinion that the City of Visalia’s scoping comments were not considered by the Draft EIR analysis.

The potential project-related impacts of Noise, Transportation and Traffic, Population and Housing are limited to the temporary impacts associated with project construction - future operation of the Proposed Project would have no impact to these resources areas. Only the Project’s Aesthetics impacts would potentially result in permanent impacts to the City. As discussed in Section 4.9, *Land Use, Policies and Planning*, due to the CPUC’s preemptive authority, while inconsistency with General Plan land use and zoning designation are disclosed, such inconsistency do not result in significant impacts under CEQA as the City of Visalia has no land use authority over the project.

The Proposed Project and alternatives’ potential visual impacts to Visalia residents are analyzed in Section 4.1, *Aesthetics*. Specifically, Viewpoints 1 and 10 were analyzed to evaluate the impacts to Visalia residents and Simulation Viewpoints A and B were generated to characterize the visual resource changes associated with the Proposed Project. The consistency of the Proposed Project to General Plan land use and zoning designations are discussed in Section 4.9, *Land Use, Policies and Planning*. Potential construction-related noise and traffic impacts to Visalia residents were analyzed respectively in Section 4.10, *Noise* and Section 4.14, *Transportation and Traffic*. Similarly, the construction related impacts to population and housing were evaluated in Section 4.11, *Population and Housing*. For all these resource areas, the Draft EIR concluded that the Project would ultimately result in less than significant or in some cases no impacts.

Response I92-3

The City of Visalia refers to the comments made by another City representative, Mr. Mike Olmos, regarding mitigation measures to offset

impacts to visual resources, public facilities and future private development. See Response I91-5.

- Response I92-4 The commenter requests that the Draft EIR provide greater information on the property rights that SCE will need to obtain in the ROW acquisition process for the Propose Project or alternatives. The commenter also asserts that SCE will expand its existing easement rights over its ROW lands to decrease the current landowners use other the ROW properties or will seek fee ownership of the properties.
- See Response 025-2 for discussion of the Draft EIR’s evaluation and identification of the agricultural resource impacts to local land owners. The commenter is incorrect in their assertion that SCE will acquire greater easement rights for its existing ROW properties. While SCE may increase as necessary enforcement of some of its existing rights (e.g. such as more vigilant application maintenance buffers and Standard Vegetation Management procedures for crop within the ROW), this would not require nor represent any expansion of SCE easements. Consequently, any such resulting effects to current land owners within the existing ROW are not new or project-related impacts.

Letter I93, Mike and Sharon Potts

- Response I93-1 The commenter expresses support for Alternative 3, primarily because of general concerns regarding impacts to farmland, water supply, and economic impact. Please see Master Response 4.6 for information regarding Alternative 3, Master Responses 4.4 and 4.5 for information regarding groundwater and wells, respectively, and Master Response 4.7 for information regarding economic impacts.

Letter I94, Tami Tarbell-Lea

- Response I94-1 The commenter expresses general support for Alternative 3, primarily because of concerns regarding impacts to aesthetics, farming livelihood, property values, and exposure to EMF. Please see Master Response 4.6 for information regarding Alternative 3, Master Response 4.7 for information regarding property values, and Master Response 4.3 for information regarding EMF.

Letter I95, Robert Ward

- Response I95-1 The commenter is referred to Master Response 4.7 (Non-CEQA).
- Response I95-2 The commenter is concerned about potential impacts to irrigation lines and the feasibility of relocating wells (if necessary). Concerning the potential

relocation of wells, the commenter is referred to Master Response 4.5. Concerning general impacts to irrigation systems and infrastructure, the commenter is referred to Master Response 4.1.

Response I95-3 The commenter is concerned that cleared land under the transmission line would create a path for dirt bikers, trash dumping, and trespassing for thieves and vandalism.

As identified in the Draft EIR Section 2.7.1.2 on page 2-25, access on new access and spur roads that would be developed for the project would be controlled by the installation of gates at fenced property lines. Therefore, unauthorized access to the ROW and other project components would be controlled.

Response I95-4 The commenter expresses concern for farm worker safety and contends that associated issues have not been addressed in the Draft EIR. For discussion related to safety associated with cardiac pacemakers and electrical shock, refer to the Draft EIR Impact 4.7-10 and Impact 4.7-11 discussions on pages 4.7-22 through 4.7-24. For information related to health risks associated with electric and magnetic fields, see Master Response 4.3 on EMF.

The comment also indicates that the Draft EIR failed to address safety issues associated with the use of helicopters for spraying and frost protection. Although helicopters are not specifically mentioned, the discussion of safety hazards to aerial spray applicators presented on Draft EIR page 4.7-18 is applicable to all aerial spray applicators, including airplane and helicopter pilots. With regard to helicopter use to protect against frost, the following clarifications have been made to the Draft EIR.

The following heading on Draft EIR page 4.7-4 has been changed as follows.

Agricultural Aerial Spaying and Frost Control

The following sentence has been added to the end of the first paragraph under the Agricultural Aerial Spraying heading on Draft EIR page 4.7-4.

In addition to aerial applicators, slow-moving helicopters are sometimes used in the project area to protect crops from frost by circulating warm air near the crops.

The following changes have been made to the Impact 4.7-6 discussion presented Draft EIR page 4.7-18.

Impact 4.7-6: The Proposed Project could create a safety hazard to aerial spray applicators and frost protection helicopter pilots. Less than significant with mitigation (Class II)

The primary reason that transmission lines and towers are a safety hazard for aerial applicators and frost protection helicopter pilots is because they present an additional obstacle for pilots to avoid. The following discussion describes the specific circumstances that present a safety hazard to aerial applicators and frost protection helicopter pilots. New transmission lines are especially hazardous when they are: diagonally oriented, relative to field boundaries; exist side-by-side with other transmission lines; create an angle perpendicular to an existing line; constructed within a new utility ROW; and when they are not clearly visible.

The Proposed Project would represent a potentially significant hazard to aerial sprayers and frost protection helicopter pilots because it would create a right angle to the existing Big Creek-Rector transmission lines within an agricultural use, and it would result in approximately 15.5 miles of new 120-foot to 160-foot poles/towers and conductors within or immediately adjacent to existing agricultural fields, orchards, and vineyards where no such structures currently exist.

Because of the infrequent nature of aerial spraying and frost protection using helicopters in the study area, pilots may fly over agricultural fields that they have not been to in six months or longer. In those cases, pilots could have no previous knowledge that a new transmission line and towers have been constructed, which creates an increased danger for pilots. To ensure pilot notification of the new transmission line, the following mitigation measure shall be implemented.

Clarifications to Mitigation Measure 4.7-6 to reflect this comment are included with other changes to that measure in Response O24-106.

Response I95-5 The commenter expresses general support for Alternative 3, primarily because of concerns regarding impacts to farmland and agricultural resources. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I96, Diane King

Response I96-1 The commenter expresses general support for Alternative 3, with modifications to avoid the sensitive vernal pools, primarily because it would have less impacts to farmland and the Hengst Farms in particular. This comment does not identify any new issues that were not addressed in the Draft EIR. Please see Master Response 4.6 for information regarding Alternative 3.

Letter I97, Patty Colson

Response I97-1 The commenter favors Alternative 4 and would like to know why, in simple terms, it is not the best route. The commenter is referred to the Draft EIR, Chapter 3, *Alternatives and Cumulative Project*, Section 3.5 *Alternatives Eliminated from Full EIR Evaluation*, on pages 3-20 and 3-21. The voltage drop that would be experienced for any loop south of the Rector Substation would substantially reduce the effectiveness of such an alternative, and would not meet the basic project objective of improving the power flow and system strength capabilities in the system. The commenter is also referred to Appendix D of the Draft EIR, a supplemental alignment sensitivity analysis conducted by SCE and independently reviewed by the EIR team that assesses the reliability of various alignment alternatives, including Alternative 4.

Letter I98, Tony Calcagno

Response I98-1 The commenter provides three newspaper articles written after the July 23, 2009 public comment meeting on the Proposed Project. Comment noted.

References – Chapter 6

- CCLD, 2009. California Department of Social Services – Community Care Licensing Division, Search for a Licensed Facility. Available at: http://www.cclld.ca.gov/docs/cclld_search/cclld_search.aspx. Accessed September 17, 2009.
- GoogleMaps, 2009. Search for “Daycare” and “Childcare” near Filbert Road, Exeter, CA 93221. Available at: www.maps.google.com. Accessed September 17, 2009.
- Yellowpages.com, 2009. Search for “Childcare” in Exeter, CA. Available at: <http://www.yellowpages.com/Exeter-CA/Child-Care?sort=distance>. Accessed September 17, 2009.

CHAPTER 7

Responses to Public Meeting Comments

Letter PM – Public Meeting

Response PM-1 The commenter expresses the opinion that impacts to Class 1 soils have not been adequately addressed in the Draft EIR, and claims that there are alternatives that do not impact Class 1 soils. The commenter is referred to Draft EIR Section 4.2, *Agricultural Resources*. The analysis in Section 4.2 considers soil categories based on qualifying soil types as determined by the U.S. Department of Agriculture, Soil Conservation Service. This is consistent with the significance criteria in Appendix G of the CEQA guidelines. To establish the setting and perform the analysis, Important Farmland Maps produced by the California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP) were reviewed. Draft EIR Table 4.2-3 on page 4.2-5 provides the acreages of agricultural farmland contained in the ROW of the Proposed Project and alternatives, including *Prime Farmland*, *Farmland of Statewide Importance*, and *Unique Farmland* (“Farmland”). Definitions of these Farmland categories are provided on page 4.2-2. Together, the three Farmland classifications comprise the soils with the best physical and chemical characteristics for growing crops, which would include the Class 1 soil classification stated by the commenter.

Impacts to Farmland are analyzed under Impact 4.2-1, 4.2-2, 4.2-4 and 4.2-5 (see Appendix G which provides the Final EIR analysis of impacts to agriculture). For the Proposed Project and all alternatives, impacts to Farmland would be significant unmitigable. Contrary to the commenter’s statement that there are alternatives that would not impact Class 1 soils, there are no alternatives that would not remove Farmland from agricultural production.

Response PM-2 The commenter is concerned that the Draft EIR does not provide a preference based on air quality, and would like to see carbon sequestration from agriculture included in the air quality analysis. The Draft EIR’s “No Preference” determination was not based on the idea that all alignments necessarily have an equal magnitude of air quality impacts. Instead, the “No Preference” determination is based on the analysis’ findings that impacts for the Proposed Project and alternatives were all determined to be less than significance with mitigation.

The loss of carbon sequestration from orchard trees is included in Section 4.3, *Air Quality*, under Impact 4.3-8—the potential for the Proposed Project to generate short-term and long-term emissions of greenhouse gases (GHGs). As discussed on pages 4.3-27 “the proposed removal of approximately 4,900 to 6,400 trees from orchards during construction could result in the generation of greenhouse gas emissions from tree disposal, depending on disposal methods... The proposed permanent removal of 2,900 trees may affect carbon sequestration in the project area.” Implementation of Mitigation Measures 4.3-8b and 4.3-8c would reduce impacts from lost carbon sequestration to less than significant.

Response PM-3

The commenter is concerned that the project could conflict with the Tulare County Rural Valley Lands Plan (RVLP), in particular, with the RVLP policy that projects in Tulare County attempt to avoid *Prime Farmland*. The commenter is referred to Section 4.9, *Land Use, Planning, and Policies*, which evaluates the consistency of the Proposed Project and alternatives with the RVLP. As stated on page 4.9-15, “The RVLP does not discuss the allowance or disallowance of transmission line facilities within [its] land use designations; it defers to the Tulare County Zoning Ordinance... The Proposed Project would traverse parcels zoned by the Tulare County Zoning Ordinance as *AE-20* and *AE-40*, *AF*, *A-1*, *PD*, *SC*, *M*, and *C-3*... Public utility structures, including transmission lines, are permitted within the *AE-20*, *AE-40*, *AF*, *A-1*, and *C-3* districts subject to obtaining a Special Use Permit...”

Moreover, as discussed in Response O10-8, the California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Although these projects are exempt from local land use and zoning regulations and discretionary permitting (i.e., would require approval from a local decision-making body such as a planning commission or city council), General Order No. 131-D, Section XIV.B requires that in locating a project “the public utility shall consult with local agencies regarding land use matter.” Consequently, while the project is not subject to local land use plans and policies, the public utility is required to obtain any required non-discretionary local permits.

Regarding impacts to Farmland, the commenter is referred to Section 4.2, *Agricultural Resources*. Temporary and permanent impacts to Farmland are calculated for the Proposed Project and each alternative. In Chapter 5, *Comparison of Alternatives*, page 5-4, row two, Alternative 3 is cited as the preferred alternative with respect to agricultural resources, because it would have the least impacts on agriculture.

- Response PM-4 The commenter questions why the Draft EIR concludes that impacts to vernal pools within the Stone Corral Ecological Preserve (SCEP) would be “unmitigable” when other projects in California such as the U.C. Merced campus have successfully mitigated impacts to vernal pools. The EIR does not conclude that impacts to vernal pools are unmitigable in a general sense. The EIR states that Alternative 3, as proposed, would cause substantial and permanent impacts to vernal pools at the SCEP. This conclusion is based on several contributing factors including the relatively small size of the SCEP, the magnitude of the Proposed Project within the SCEP and anticipated loss of wetland habitat, the location of the alignment through one of the deepest, most sensitive portions of the preserve, the federal designation of the SCEP as critical habitat for multiple listed species, and the presence of these species within the immediate project alignment. The project would cause permanent impacts to several acres of vernal pools and associated listed species and could permanently reduce biological values within the preserve. Based on these considerations, the Draft EIR concluded that Alternative 3 would have substantial permanent impacts on vernal pool habitat and hydrology within the SCEP. In their review of the Draft EIR, the California Department of Fish and Game agreed with the Draft EIR findings that Alternative 3 could have substantial permanent impacts to the SCER (See Comment Letter O13).
- Response PM-5 The commenter is concerned about the project’s cumulative impacts to agriculture, including from indirect impacts such as the conversion of agricultural lands to non-agricultural use. The commenter is referred to Appendix G, the updated version of the Draft EIR’s Section 4.2, *Agricultural Resources*. The analysis in Appendix G considers both direct conversion of Farmland to non-agricultural use (Impact 4.2-2), as well as indirect conversion (Impacts 4.2-4 and 4.2-5) such as from impacts to existing irrigation and other ancillary agricultural systems or the removal of orchards which may not be replanted. For the Proposed Project and all alternatives, the conversion of Farmland to non-agricultural use would be significant unmitigable. Cumulative impacts to Farmland, addressed in Subsection 4.2-5, Cumulative Impacts, were also determined to be significant unmitigable.
- Response PM-6 The commenter is referred to Response I32-1.
- Response PM-7 The commenter is referred to Responses I31-1, I31-2, and I31-3.
- Response PM-8 The commenter is referred to Responses I33-1 and I33-2.
- Response PM-9 The commenter is referred to Responses I30-1, I30-2, and I30-3.
- Response PM-10 The commenter states that his father is unwilling to build on his property because it is in the ROW of one of the alignments. The commenter supports Alternative 3, and expresses concern about the economic impacts from the

Proposed Project and alternatives, particularly with respect to impacts to agriculture and job loss. Comments noted. Regarding economic impacts, the commenter is referred to Master Response 4.7, Non-CEQA issues.

- Response PM-11 The commenter is referred to Responses O6-1, O6-2, and O6-3.
- Response PM-12 The commenter is referred to Responses I6-1 through I6-8.
- Response PM-13 The commenter expresses the opinion that farmers in the project area are highly trained and educated in agricultural matters, and that economic events, weather, drought and other factors have hurt many farming operations. The commenter recommends that the CPUC take into consideration the emotional and economic stress the Proposed Project would have on local farmers and families. Comments noted. Regarding economic impacts, the commenter is referred to Master Response 4.7, Non-CEQA issues.
- Response PM-14 The commenter states that taking a small portion of a small farm could render the farm unusable for agricultural purposes, and that Farmland would have to be removed rather than abandoned, to prevent insect infestation. This would lead to an additional loss of Farmland. As discussed in Master Response 4.7, (Non-CEQA), generally the Proposed Project's ROW routes are located along access routes or at peripheries of farmland parcels. The proposed ROW alignments are located to minimize the fragmentation and disruption to the agricultural properties within each alignment. The only permanent lost agricultural production would be the small acreage of Farmland needed for the proposed new access roads, utility poles and lattice towers (including their 50 and 100-foot maintenance buffers, respectively). Each pole would be spaced approximately 1,000 feet apart. Consequently even within the narrow confines of the ROW corridor, 90 percent of the existing Farmland would continue to be available for crop farming. The actual proportion of permanent lost agriculture land for individual farmers would be even smaller since most farmland properties are considerably larger than the project's ROW corridors and local growers typically farm numerous land parcels.

The commenter is also concerned about the loss of soil suitable for citrus growth. The loss of citrus is addressed in the Section 4.2, *Agricultural Resources*. According to the Final EIR analysis (see Appendix G, Tables 4.2-5, 4.2-8, 4.2-10, and 4.2-12), the Proposed Project would result in the permanent removal of 14.9 acres of orange orchards, 0.6 acres of lemon, 0.5 acres of orange/grapefruit mix, and 0.1 acre of tangerine orchards. The Proposed Project would allow for the reclamation of 0.1 acres of tangerine orchards. Alternative 2 would result in the permanent removal of 9.3 acres of orange orchards and 1.7 acres of tangerine orchards, and would reclaim 0.1 acres of tangerine orchards and 0.7 acres of orange orchards. Alternative 3 would result

in the permanent removal of 6.3 acres of orange orchards and 0.1 acres of tangerine orchards, and would reclaim 0.1 acres of tangerine orchards and 0.8 acres of orange orchards. Alternative 6 would result in the permanent removal of 21.1 acres of orange orchards and 0.1 acres of tangerine orchards, and would reclaim 0.1 acres of tangerine orchards and 0.6 acres of orange orchards.

Response PM-15 The commenter is concerned about loss of carbon sequestration from the removal of citrus orchards. The commenter is referred to Response PM-2.

Response PM-16 The commenter is concerned about impacts to the planned City of Farmersville Industrial Park. See Response I11-1.

Response PM-17 The commenter is concerned about visual impacts to SR 65, just north of Exeter. Visual impacts to SR 65 are addressed in Section 4.1, *Aesthetics*. As discussed on page 4.1-18, “[t]he Proposed Project alignment would be within foreground views from SR 65, where the proposed alignment would cross the highway. Traffic volumes are moderate (average 10,000 vehicles per day), and views are generally panoramic and open but of short duration (Caltrans, 2009).” As shown in Table 4.1-2, page 4.1-20, the visual quality of SR 65 is representative, and the route would experience a moderate number of viewers. View duration would be low. The following text from the Draft EIR has been corrected (page 4.1-20, Table 4.1-2, SR 65 row), to reflect the low view duration:

SR 65	Representative	Foreground/Midleground Distance Unobstructed Views Moderate Number of Viewers Low View Duration	Low	Crossed by Proposed Project
-------	----------------	--	-----	-----------------------------

Given these characteristics, visual sensitivity of SR 65 is considered low. As such, despite the visual change resulting from construction of the Proposed Project, visual impacts would be less than significant.

Response PM-18 The commenter expresses the opinion that it would be easier to mitigate biological impacts for Alternative 3, because it cuts through fewer parcels. Appendix I is a table that shows all parcels traversed by the Proposed Project and alternatives, and provides information on each parcel including Land Use and Zoning designations, current land use, and crop data (where applicable). According to this table, Alternative 3 would traverse 117 parcels. The Proposed Project would traverse 90 parcels, and Alternatives 2, 6, and 3A would traverse 130, 113, and 130 parcels, respectively.

Response PM-19 The commenter is concerned about the loss of agricultural jobs resulting from the construction of Alternative 2. See Master Response 4.7 (Non-CEQA).

- Response PM-20 The commenter is referred to Responses O3-1, O3-2 and O2-2.
- Response PM-21 Regarding impacts to agricultural wells, see Master Response 4.5. Regarding water levels along the Proposed Project and Alternatives 2 and 6, see Draft EIR Section 4.15, *Utilities and Service Systems*. Current water uses are described under Water on pages 4.15-1 to 4.15-2. The potential for the Proposed Project to require new or expanded water supply resources or entitlements is analyzed on page 4.15-8. Impacts for the Proposed Project and all alternatives were determined to be less than significant. Regarding impacts to irrigation infrastructure, see Master Response 4.1.
- Response PM-22 The commenter is referred to Master Response 4.1 regarding wind machines, and Master Response 4.7 regarding potential job loss.
- Response PM-23 The commenter is referred to Master Response 4.7 regarding potential job loss.
- Response PM-24 The commenter is concerned about the loss of agricultural jobs and impacts to property values resulting from the construction of Alternative 2 or 6. See Master Response 4.7 (Non-CEQA). The commenter supports Alternative 3. Comment noted.
- Response PM-25 The commenter is referred to Responses I87-1, I87-2, and I87-3.
- Response PM-26 The commenter is referred to Response I88-1.
- Response PM-27 The commenter expresses support for a version of Alternative 3 that minimizes habitat impacts and avoids new ROW through agricultural land. Comment noted. The commenter states that Paramount Citrus is one of the largest employers in the project area, and provides jobs not only for their own employees, but also for the local vendors they hire. The commenter is concerned about the financial impacts of the Proposed Project and all alternatives, particularly Alternative 2. See Master Response 4.7 (Non-CEQA).
- Response PM-28 The commenter provides an analysis of impacts to Paramount Citrus Farming. See Response O19-5.
- Response PM-29 The commenter is concerned about the safety risk of farming equipment use under or near transmission lines, including wind machines. See Response O2-2. Regarding impacts from relocated wind machines, see Master Response 4.1.
- Response PM-30 The commenter is concerned about impacts to irrigation infrastructure. See Master Response 4.1.

- Response PM-31 The commenter is concerned about economic impacts from Alternative 2. See Master Response 4.7.
- Response PM-32 The commenter is referred to Responses O18-1, O18-2, O18-3, O18-6, and Master Response 4.6.
- Response PM-33 The commenter is referred to Responses I43-1, I43-2 and I43-3.
- Response PM-34 The commenter is referred to Response I44-1.
- Response PM-35 The commenter is concerned that construction of the Proposed Project would cause him to lose a well, because of its proximity to the transmission lines. The commenter is referred to Master Response 4.5.
- Response PM-36 The commenter is concerned about the legal ramifications of trespassers damaging his property in the ROW. As identified in the Draft EIR Section 2.7.1.2 on page 2-25, unauthorized vehicular access on new access and spur roads that would be developed for the project would be controlled by the installation of gates at fenced property lines. Regarding whether SCE would defend and indemnify for possible legal costs, that issue would presumably have to be resolved between SCE and the individual property owners during ROW agreement negotiations and is not a matter for consideration in the CEQA analysis.
- Response PM-37 The commenter disagrees with the Draft EIR analysis that Alternative 3 would have significant unmitigable impacts to vernal pools and fairy shrimp. The commenter understands from conversations with the California Department of Fish and Game that the alignment could be rerouted around the vernal pools. The commenter is referred to Master Response 4.6, regarding Alternative 3A.
- Response PM-38 The commenter has a report for the Draft EIR analysts, and proposes taking a vote on which alignment should be chosen. Comments noted.
- Response PM-39 The commenter is referred to Responses O9-1, O9-2, and O9-3.
- Response PM-40 The commenter is referred to Responses I85-1, I85-2, and Master Response 4.5 concerning wagon wheel wells.
- Response PM-41 The commenter is referred to Responses I25-1, I25-2, I25-3, I25-5 and I25-7.
- Response PM-42 The commenter is referred to Responses I75-5, I75-6 and I75-7.
- Response PM-43 The commenter expresses the opinion that the land in the project area should be preserved for future generations. Comment noted.

- Response PM-44 The commenter is referred to Responses I26-1 and I26-3.
- Response PM-45 The commenter is referred to Responses I37-1, I37-2, I37-3 and I37-4.
- Response PM-46 The commenter is referred to Responses I95-1, I95-2, I95-3, I95-4 and I95-5.
- Response PM-47 The commenter presents several comments that relate to the relationship of the Alternative 3 alignment to the Stone Corral Ecological Preserve (SCEP). First, the commenter states that the Alternative 3 alignment follows an existing SCE alignment. This comment is noted. The EIR Project Description clearly identifies the proposed activities, which include the removal of existing structures. However, it is important to recognize that the presence of facilities within an existing right-of-way does not lessen the anticipated impact of Alternative 3 to wetlands, listed species or critical habitat in the SCEP, which would be substantial.

The commenter questions why Alternative 3 the Proposed Project, which would result in a net reduction of structures within the SCEP, could not create mitigation opportunities within the existing right-of-way. While the footprint of the proposed new structures would be smaller than the existing facilities, the removal of existing facilities (and their foundations) and the construction of new structures would require the use of work areas, temporary access routes and equipment staging areas within the most sensitive portions of the SCEP. Project activities within these areas could greatly impact wetlands and threatened and endangered species that occur within the alignment. In addition to the removal of old structures and creation of new ones, a permanent year-round access road would cause an additional loss of biological resources. Thus, the net reduction in structures within SCEP would not produce mitigation opportunities for affected species or wetlands.

- Response PM-48 The commenter provides statistics regarding agriculture-related jobs in Tulare County and the agriculture-based economy in the County, and asks that the CPUC consider the agriculturally superior route. The commenter correctly states that the Proposed Project and Alternatives 2 and 6 have more significant unavoidable impacts to agricultural resources than Alternative 3, and states that the Tulare County Farm Bureau supports Alternative 3A. For an analysis of Alternative 3A, see Master Response 4.6. Regarding economic impacts resulting from the Proposed Project and alternatives, see Master Response 4.7.

The commenter states the Tulare County Farm Bureau will submit more extensive written comments. For responses to those comments, see Responses O20-1 through O20-20.

- Response PM-49 The commenter expresses the opinion that the Draft EIR does not adequately address several mitigation issues, including hydrological issues, carbon sequestration, and quality-of-life impacts. The commenter also recommends the formation of a community-based mitigation advisory panel, to allow the community to play a role in resolving agricultural and landowner issues. Regarding issues pertaining to agricultural wells and irrigation infrastructure, see Master Responses 4.5 and 4.1, respectively. Regarding carbon sequestration, see Response PM-2. Regarding the formation of a community-based agricultural advisory committee, see Response O20-19.
- Response PM-50 The commenter expresses support for Alternative 3A, and supports the Garamendi Principle. Comment noted. See Master Response 4.6.
- Response PM-51 The commenter is referred to Responses I79-1 and I79-3.
- Response PM-52 The commenter is referred to Master Response 4.1, pertaining to agriculture and irrigation infrastructure.
- Response PM-53 The commenter is referred to Responses O22-1, O22-2, O22-3 and O22-4.
- Response PM-54 The EIR preparers acknowledge the sensitivity of portions of the project area to Native Americans and believe this is an important issue for consideration by decision-makers in alignment selection and project implementation.
- The commenter is referred to section 4.5.1- *Methods and Results* (specifically pages 4.5-12 and 4.5-13), which summarizes the Native American consultation undertaken in support of this project. Consultation between SCE and representatives of local Native American groups is ongoing. Identification of issues important to the Native American community, including areas of cultural sensitivity that would be crossed by the Proposed Project and its alternative routes, has occurred as a result of this contact. Consultation via open and respectful communication should continue throughout the project.
- Response PM-55 The commenter is referred to Responses I17-1, I17-2, I17-3, and I17-4.
- Response PM-56 The commenter is referred to Response I63-1.
- Response PM-57 The commenter is concerned about the visual impacts the Proposed Project would have on the City of Farmersville, specifically for motorists exiting SR 198. See Responses O10-2, O10-4, and O10-6.
- Response PM-58 The commenter is concerned that the Proposed Project would reduce the City of Farmersville's ability to market highway commercial and industrial development. The commenter states that this could result in a loss of a

potential increase in the City's tax base, which would be particularly difficult for Farmersville given its high level of poverty. See Response O10-9.

Response PM-59 The commenter expresses the opinion that the Draft EIR underestimates the total Farmland that will be lost from the construction of the Proposed Project. The commenter is referred to Response O10-7.

Response PM-60 The commenter is concerned that the Proposed Project and Alternative 3 would result in the loss of agricultural jobs. The commenter is referred to Master Response 4.7 (Non-CEQA).

Response PM-61 The commenter states that if Alternative 2 or Alternative 6 is approved, then the local communities will dry up and there will be no need for a transmission line. Comment noted.

CHAPTER 8

Revisions to the Draft EIR

8.1 Introduction

Pursuant to CEQA Guidelines Section 15132, this section presents the changes that were made to the Draft EIR to clarify or amplify its text in response to received comments. Such changes are insignificant as the term is used in CEQA Guidelines Section 15088.5(b), in that the changes merely clarify or amplify or make insignificant modifications.

The changes are grouped by Draft EIR chapters and are then shown by page number in the Draft EIR and identified as to the location of the change in the body of the text or table.

Appendix I contains the Mitigation Monitoring, Reporting, and Compliance Program (MMRCP) for Alternative 2, the Environmentally Superior Alternative. Consequently, clarification to mitigation measures that would affect Alternative 2, in addition to being listed here, are included in the MMRCP in Appendix I.

Where changes are shown inserted in the existing Draft EIR text, revised or new language is underlined, deleted language is indicated by ~~strikethrough text~~, and the original text is shown without underline or strikethrough text.

8.2 Text Changes

Page **Identification / Text Change**

Executive Summary

ES-14 *To reflect changes to impacts to agricultural resources, Table ES-2 is updated as follows:*

**TABLE ES-2
SUMMARY OF SIGNIFICANT UNMITIGABLE (CLASS I) ENVIRONMENTAL IMPACTS
OF THE PROPOSED PROJECT AND ALTERNATIVES**

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 34.4<u>31.9</u> acres of Farmland (e.g., 46.4<u>16.8</u> acres of Prime Farmland, 0.7<u>14.4</u> acres of Farmland of Statewide Importance, and 44.3<u>0.7</u> acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.9<u>25.6</u> acres of Farmland (e.g., 9.5<u>10.0</u> acres of Prime Farmland, 0.6<u>15.0</u> acres of Farmland of Statewide Importance, and 43.8<u>0.6</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 46.7<u>18.2</u> acres of Farmland (e.g., 6.6<u>6.9</u> acres of Prime Farmland, 0.9<u>10.3</u> acres of Farmland of Statewide Importance, and 9.2<u>1.1</u> acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30.7<u>31.6</u> acres of Farmland (6.7<u>7.1</u> acres of Prime Farmland, 24.0<u>24.5</u> acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

ES-15 *To reflect changes to impacts to agricultural resources, the second and third paragraphs are updated as follows:*

However, impacts to agricultural resources do vary enough to determine a preferred alternative from an agricultural resources perspective. While impacts on agricultural resources would remain significant and unmitigable, Alternative 3 would be preferred as it would impact only ~~46.7~~18.2 acres of Farmland compared to ~~34.4~~31.9 for the Proposed Project. ~~Moreover, Alternative 3 would result in conversion of only 12 acres of Farmland that supports walnut orchards from production while the Proposed Project would result in conversion of 29 acres.~~

While Alternative 3 would result in the least impacts on agricultural resources, due its significant unmitigable impacts to biological resources, Alternative 3 would not be environmentally superior. Therefore, while Alternative 2 would result in slightly greater impacts to Farmland compared to Alternative 3 (but ~~7.2~~6.3 acres less than the Proposed Project), it would not result in significant unmitigable impacts to biological resources and therefore is selected here as the Environmentally Superior Alternative.

ES-16 *The second row of Table ES—3 is revised to reflect changes to impacts to agricultural resources:*

Resource Area	Proposed Project	Alternative 2	Alternative 3	Alternative 6
Aesthetics	No Preference	No Preference	No Preference	No Preference
Agriculture Resources	Significant unmitigable impacts would include permanent removal of 34.4 <u>31.9</u> acres of Farmland and conversion of 29 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 23.9 <u>25.6</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.	Significant unmitigable impacts would include permanent removal of 46.7 <u>18.2</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production. Preferred because it has the least impacts on agricultural resources	Significant unmitigable impacts would include permanent removal of 30.7 <u>31.6</u> acres of Farmland and conversion of 12 acres of Farmland that supports walnut orchards from production.

ES-17 *In Table ES—4 the fourth row under Agricultural Resources is revised to reflect changes to impacts to agricultural resources:*

4.2-4: Conversion of additional Farmland to non-agricultural use		4.2-4: Implement Mitigation Measure 4.2-2-Increase structure heights in new ROW containing walnut orchards	Significant unmitigable <u>Less than significant</u>
---	--	---	--

Chapter 2. Project Description

2-1 *The first paragraph under Section 2.2, Project Location, is clarified as follows:*

The Proposed Project transmission line traverses east from the City of Visalia through the northern portion of the City north of the cities of Farmersville and north of the City of Exeter (Figure 2-1).

2-20 *The typographical error in Section 2.5.3, Poles and Towers, first paragraph is corrected as follows:*

In areas along the Proposed Project alignment where extra structuraling strength would be required...

2-20 *To provide clarification regarding final engineering of transmission structures, the following language has been added as a note under Table 2-2:*

The exact number, type, configuration, and height of the structures are subject to final engineering.

2-22 *The fourth sentence under Section 2.6, Rights-of-Way Requirements, has been revised as follows:*

Approximately 211 acres of the new ROW would be acquired for the transmission line, including acquisition or condemnation of a 2,800 square foot residence located within the ROW to be acquired.

2-22 *The sixth sentence under Section 2.6, Rights-of-Way Requirements, has been revised as follows:*

These roads would require the acquisition of approximately 2.1 acres of new access road easements.~~ROW.~~

2-24 *The first sentence at the top of page 2-24 has been modified as follows:*

...private~~ranching~~ roads would be used to the maximum extent feasible.

2-26 *Under the Foundations heading, the following language has been added as a note under Table 2-4:*

The exact number, type, configuration, and height of the structures are subject to final engineering.

2-29 *The second sentence under the Conductor Shield Wire Stringing heading has been updated as follows:*

IEEE Standard ~~534-1992~~-524-2003

- 2-33** *The first sentence under the Stormwater Pollution and Prevention heading has been clarified as follows:*

A Stormwater Pollution and Prevention Plan would be prepared for the Proposed Project, prior to commencement of construction, to provide detail of the locations that hazardous materials may be stored during construction...

- 2-39** *The third column and references in Table 2-8 have been revised as follows:*

**TABLE 2-8
PROPOSED CONSTRUCTION TIMETABLE**

Proposed Project Component	Duration (months)	Estimated Schedule
Material Staging Yard preparation	Less than 1	October 2012 <u>September 2011</u>
ROW clearing, access road and structure pad construction	3	October—December 2012 <u>September—November 2011</u>
Demolition of 1.1 miles of existing Big Creek 3 – Rector 220 kV transmission facilities	1	October 2012 <u>September 2011</u>
Construction of 1.1 miles of new Big Creek 1-Rector and Big Creek 3 – Rector 220 kV double circuit transmission line	2	November—December 2012 <u>October—November 2011</u>
Demolition of 1.1 miles of existing Big Creek 1-Rector 220 kV transmission facilities	1	January 2013 <u>December 2011</u>
Construction of 18.5 miles of new 220 kV double circuit transmission line	10	January—October 2013 <u>December 2011—September 2012</u>
Post construction clean-up and restoration	1	November 2013 <u>October 2012</u>

SOURCE: SCE, 2008b; SCE, 2009a.

- 2-40** *Section 2.8.1, 220 kV Transmission Line, first paragraph, has been corrected as follows:*

This involves both routineg preventative maintenance...

- 2-40** *Section 2.8.1, 220 kV Transmission Line, third paragraph, has been revised as follows:*

Maintenance of the transmission facilities would include limitations on certain land uses that may restrict SCE's ability to have unrestricted 24/7 access to the ROW and its transmission facilities, and property owner maintenance of vegetation height within the ROW. After review and approval by SCE, Land uses that would typically be permitted within the ROW after project completion include agricultural and landscaping, underground facilities, biking and hiking trails, and automotive vehicle parking. ~~Specific requirements~~ SCE's guidelines associated with these activities include:

- 2-41** *Section 2.9.1, second paragraph, first sentence, has been modified to include a more accurate description of electric fields:*

Potential health effects from exposure to *electric fields* from transmission lines (i.e., the ~~effect~~ force field produced by the existence of an electric charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) have not been established. typically Electric fields are generally not thought of as a concern do not present a human health risk since electric fields are effectively shielded by materials such as trees, walls, etc.

- 2-41** *Section 2.9.1, second paragraph, last sentence, has been modified as follows to indicate the correct appendix letter:*

Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix ~~D~~ B.

- 2-45** *The following reference is added at the end of Chapter 2, Project Description:*

SCE, 2009a. Comment Letter on Draft EIR. July 31, 2009.

Chapter 3. Alternatives and Cumulative Projects

- 3-2** *The typographical error in the third paragraph is corrected to read:*

CEQA Guidelines (Section 15126.2(a))...

- 3-2** *The typographical error in the first paragraph of Section 3.2.1 is corrected to read:*

(Section 165126.6(b))

- 3-11** *The fourth sentence of the first paragraph is clarified to read:*

Work areas (i.e., tensioning, stringing, and pulling sites) ~~would~~ may be required outside of the ROW . . .

- 3-14** *The fourth sentence of the first paragraph is clarified to read:*

Work areas (i.e., tensioning, stringing, and pulling sites) ~~would~~ may be required outside of the ROW . . .

- 3-17** *The following language has been added as a note under Tables 3-9 and 3-10:*

The exact number, type, configuration, and height of the structures are subject to final engineering.

Section 4.1, Aesthetics

4.1-19 *The second paragraph under the Parks and Recreation heading is updated as follows:*

Cutler Park, a 50-acre property, is located approximately two miles north of the Proposed Project and approximately one-quarter mile east of Alternatives 2 ~~and 3, 3, and 6~~ near the community of Ivanhoe. Attendance is generally highest during the summer when there is flow in the river, as locals use the park for swimming, inner-tubing and wading. Recreational users would have no views of the Proposed Project. Views of Alternatives 2 ~~and 3, 3, and 6~~ alignments would generally be obstructed by vegetation and terrain. Despite the moderate number of views, viewer exposure would be considered low due to the limited visibility and low view duration.

4.1-20 *Table 4.1-2, fifth row under header, has been corrected to read:*

SR 65	Representative	Foreground/Middleground Distance Unobstructed Views Moderate Number of Viewers Low View Duration	Low	Crossed by Proposed Project
-------	----------------	--	-----	-----------------------------

4.1-23 *To clarify the relationship and jurisdiction of local agency plans and policies, the last paragraph is revised to read:*

According to Appendix G of the CEQA Guidelines, significant aesthetic effects on the environment include substantial, demonstrable negative aesthetic effects, ~~conflicts with adopted environmental plans and goals of the community,~~ substantial degradation of scenic vistas or highways, and/or the creation of light or glare.

4.1-24 *The following text has been added immediately following the last sentence under the heading Definition and Use of Significance Criteria:*

As discussed in Section 4.9, Land Use, Plans and Policies, CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project and alternatives. Although the Proposed Project is exempt from local land use and zoning regulations and discretionary permitting, General Order No. 131-D, Section XIV.B requires that in locating a project “the public utility shall consult with local agencies regarding land use matters.” Consequently, although CPUC has preeminent authority and local plan consistency analysis is not required, for informational purposes this EIR has identified and described relevant local agency plans and policies. These regional and local agency plans and policies were also considered in the impact analysis to assist in both identifying important visual resources and in evaluating the resource impacts.

4.1-39 *In the second paragraph, second to last sentence, the text has been changed to read:*

Additionally, implementation of Mitigation Measure 4.1-1a~~b~~ requires the use of...

4.1-41 *Mitigation Measure 4.1-2 has been clarified as follows:*

Mitigation Measure 4.1-2: Reduce visibility of staging areas. All staging areas including storage sites for excavated materials, and helicopter fly yards, shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, construction sites and staging areas and fly yards, not including construction areas around structure sites, shall be visually screened using temporary screening fencing. Fencing shall incorporate aesthetic treatment through use of appropriate, non-reflective materials, such as chain link fence with light brown vinyl slats. SCE shall submit final construction plans of the staging areas demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

4.1-45 *Mitigation Measure 4.1-5 has been updated as follows:*

Mitigation Measure 4.1-5: Implement Mitigation Measure 4.1-1 for Structures #20 and #21.

4.1-47 *The third sentence in the first paragraph has been clarified as follows:*

However, the new transmission line would appear taller and more prominent than existing utility and agricultural infrastructure.

Section 4.2, Agricultural Resources

All text changes to Section 4.2, *Agricultural Resources*, are shown in Appendix G of the Final EIR document.

Section 4.3, Air Quality

4.3-2 *Under the Existing Air Quality heading, the first paragraph, second sentence is revised as follows:*

Existing levels of air quality in the study area can generally be inferred from ambient air quality measurements conducted by SJVAPCD at its closest stations, the Visalia-North Church monitoring station located approximately three miles ~~northeast~~ northwest of the Rector Substation.

4.3-6 *Under the Greenhouse Gas Emissions and Climate Change heading, the first paragraph, eighth sentence is clarified as follows:*

The accumulation of GHGs in the atmosphere regulates the earth's temperature; however, emissions from human activities such as combustion of petroleum, coal and natural gas associated with electricity production and the use of motor vehicles have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has contributed to an increase in the temperature of the earth's atmosphere and has contributed to global climate change.

4.3-18 *Mitigation Measure 4.3-1a is revised as follows:*

Mitigation Measure 4.3-1a: SCE shall submit an Air Impact Assessment application to the SJVAPCD that demonstrates how exhaust emissions from construction equipment greater than 50 horsepower shall be reduced by at least 20 percent from the statewide average NO_x emissions rate and 45 percent from the statewide average PM10 exhaust emission rate. The Air Impact Assessment shall also demonstrate that construction NO_x emissions associated with the project would be reduced to less than 10 tons per year. These reductions shall be achieved through any combination of on-site reduction measures (e.g., utilizing add-on controls, cleaner fuels or newer lower emitting equipment) and off-site reduction fees paid directly to the SJVAPCD. Furthermore, SCE shall and/or its contractors shall achieve fleet average emissions equal to or less than the Tier II emissions standards of 4.8 NO_x grams per horsepower hour. This can be achieved through any combination of uncontrolled engines and engines complying with Tier II and above engine standards. SCE shall provide a copy of the approved application to the CPUC prior to commencement of construction activities.

4.3-18 *The last paragraph on page 4.3-18 is revised as follows:*

As discussed previously, the SJVAPCD has not developed quantitative thresholds for evaluating impacts of PM10 or PM2.5 emissions, but instead emphasizes the implementation of effective dust control measures to mitigate PM10 impacts. The SJVAPCD recommends that construction projects that generate 15 tons of fugitive PM10 emissions per year be considered significant. As shown in Table 4.3-4, construction of the Project would result in 51.1 tons of PM10 emissions, 50.6 tons of which would result from fugitive dust emissions. Approximately 14.7 tons of fugitive PM10 emissions would be emitted from grading and earth moving activities associated with transmission line construction while 35.6 tons would result from travel on unpaved roads and 0.3 tons would result from travel on paved roads.

Applying water every three hours to disturbed areas within a construction site has been shown to reduce PM10 emissions by approximately 61 percent. Limiting on-site vehicle speeds on unpaved roads to 15 miles per hour would reduce fugitive dust emissions by approximately 57 percent (SCAQMD, 2007a). Furthermore, watering unpaved roads twice daily would reduce PM10 emissions by an additional 55 percent (SCAQMD, 2007b). Therefore,

implementation of Mitigation Measure 4.3-1b would reduce fugitive dust emission from grading and earth moving activities to approximately 7.2 tons per year and emissions from travel on unpaved roads to approximately 6.8 tons per year. As a result, total fugitive dust emission associated with construction of the Proposed Project would be approximately 14.3 tons per year with implementation of Mitigation Measure 4.3-1b. Since these emissions would not exceed the SJVAPCD's recommended threshold of 15 tons per year of PM10, impacts would be less than significant.

Because most of the PM2.5 emissions that would be associated with the Proposed Project would be from fugitive dust, effective dust control measures would also mitigate PM2.5 impacts. Implementation of Mitigation Measure 4.3-1b would require SCE to implement dust control measures recommended by SJVAPCD, and would reduce impacts from PM10 and PM2.5 emissions associated with construction to less than significant.

4.3-19 *Mitigation Measure 4.3-1b, bullets nine through 11, are revised as follows:*

Mitigation Measure 4.3-1b: During construction, SCE and/or its contractors shall implement the following dust control measures.

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.)(Use of blower devices is expressly forbidden).*
- Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.

- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Limit traffic speed on unpaved roads to 15 mph.
- ~~Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.~~
- ~~Install windbreaks at windward side(s) of construction areas.~~
- Suspend excavation and grading activity when winds exceed 20 mph when visible dust emissions exceed 20 percent opacity at the construction fenceline.
- Limit area subject to excavation, grading, and other construction activity at any one time.

4.3-20 *The following text is added to Mitigation Measure 4.3-1b under the final bullet at the top of the page:*

Chemical stabilizers/suppressants used in proximity to agricultural areas must be approved by the Tulare County Farm Bureau, to ensure their use is compatible with nearby crops.

4.3-20 *The text under Impact 4.3-3 is revised as follows:*

Mitigation Measure 4.3-3 ~~includes~~ is adapted from measures recommended by the SJVAPCD to help mitigate fugitive PM10 and PM2.5 emissions from open areas. Implementation of this measure would reduce impacts to less than significant.

Mitigation Measure 4.3-3: After construction, SCE shall, ~~in perpetuity during operation of the project,~~ utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions from permanently disturbed land operations and maintenance clearance areas around poles and towers, and from new access and spur roads:

- Apply and maintain water ~~or dust suppressants~~ to all un-vegetated areas; or
- Establish ~~native~~ landowner-approved vegetation that is compliant with SCE line clearance requirements ~~on all previously disturbed areas;~~ or
- Apply and maintain landowner-approved surface treatments (e.g., gravel or crushed stone) ~~gravel or apply and maintain chemical/organic stabilizers/suppressants to all open areas.~~

- 4.3-23** *To further clarify potential impact from fugitive dust emissions during construction, the following text is added under the first paragraph under Impact 4.3-7:*

Fugitive dust emissions may also contain dust spores that cause coccidioidomycosis (Valley Fever). This disease is highly endemic to the San Joaquin Valley and often results in flu-like symptoms that typically clear within a few weeks. Individuals residing, visiting or even passing through endemic areas may be exposed to the disease. Risk of infection is highly dependent on the amount of time spent outdoors and involvement in activities that expose individuals to dusty conditions (USGS, 2000).

Earth disturbing activities associated with construction of the Proposed Project and alternatives would generate fugitive dust emissions that may contain dust spores associated with Valley Fever. Dust control measures are the main defense against infection (USGS, 2000). Implementation of Mitigation Measure 4.3-1b would reduce fugitive dust thereby limiting the chance of exposure to dust spores associated with Valley Fever. Furthermore, in California, Valley Fever infection rates are typically higher during the hot summer months following winter rains between November and April (USGS, 2000). The majority of receptors that would be exposed to fugitive dust emissions would be located along the existing SCE ROW. Due to outage constraints, it is unlikely that intensive construction activities would occur within existing ROW during hot summer months, further limiting the chance of exposure to harmful dust spores.

- 4.3-24** *To clarify the criteria listed under Impact 4.3-8 for consistency with significance criterion f), the text has been revised as follows:*

1. The potential for the project to conflict with the 39 Recommended Actions identified by CARB in its Climate Change Proposed Scoping Plan which includes nine Early Action Measures; and
2. The relative size of the project's GHG emissions in comparison to CARB's proposed operational significance threshold of 7,000 metric tons per year.
3. The project's consistency with the State's GHG reduction goal under AB 32, which would require a minimum 30 percent reduction of GHGs by 2020 compared to business as usual conditions.

- 4.3-28** *To clarify Mitigation Measure 4.3-8b, the text is revised as follows:*

Mitigation Measure 4.3-8b: During construction, SCE shall dispose of all removed trees and other green waste via the Tulare County's Wood and Green Waste Program or through a comparable program subject to approval by the CPUC. Landowners shall be permitted to keep removed trees if specifically

requested, under the condition there would be no open burning of trees and green waste. To ensure compliance with this program, SCE shall:

- collect all wood and green waste generated from the removal of orchard trees separately from other construction and demolition waste, and place wood and green waste in a separate recovery area;
- keep wood and green waste free of contaminants such as dirt, rock concrete, plastic, metal and other contaminants which can damage wood waste processing equipment, and reduce the quality of the compost; and
- prohibit the inclusion of yucca leaves, palm fronds or bamboo (which cannot be included in the salvage program) from the wood and green waste recovery area.

4.3-28 *To provide flexibility, Mitigation Measure 4.3-8c is revised as follows:*

Mitigation Measure 4.3-8c: Prior to the conclusion of construction, SCE shall establish, fund, and implement a tree replacement program ~~with the Urban Tree Foundation of Visalia, CA (or other comparable organization in Tulare County)~~ for the replacement of all permanently removed orchard trees on a 1.5 to 1 basis. In order of priority, the location for the tree replacement program shall be (1) Tulare County (utilizing an organization such as the Urban Tree Foundation of Visalia), (2) adjacent counties in the Central Valley, (3) elsewhere in California, or (4) a combination of (1) through (3). The tree replacement program shall provide for ~~the Urban Tree Foundation to selection of the appropriate~~ tree species and suitable locations for the plantings, and shall also provide for the maintenance of the plantings for a minimum of one full year to maximize survival rate. SCE shall provide the CPUC with documentation of the tree replacement program, including the types and quantities of each tree species to be planted, the planting locations, the planting schedule, and the methodology for maintaining the plantings. (Note: it is the intent of this mitigation measure to offset the loss of carbon sequestration from the permanent loss of trees, not to replace the loss of a particular crop; therefore, it is not required that the replacement trees be orchard species.)

4.3-30 *The first paragraph under the Alternative 3 heading is revised as follows:*

Construction activities associated with Alternative 3 are anticipated to take approximately 12 months longer than the Proposed Project due to the fact that Alternative 3 would require removal of 216 more single circuit lattice towers than the Proposed Project and installation of 45 more double circuit lattice towers and 40 more double circuit tubular poles. Construction of these additional structures would result in a greater amount of criteria pollutant emissions and GHG emissions. ~~However, since construction activities associated with Alternative 3 would be spread over a longer time period, emissions in any one 12-month period would be approximately the same as those anticipated from the Proposed Project.~~ Alternative 3 may require more intense construction activities due to outage constraints associated with

working in existing ROW. However, implementation of Mitigation Measure 4.3-1a would ensure that NO_x emissions would not exceed 10 tons per year by requiring on-site mitigation measures, and if necessary, off-site reduction fees paid directly to the SJVAPCD.

4.3-33 *The following references are added to Section 4.3, Air Quality:*

SCAQMD, 2007a. Table XI-A: Mitigation Measure Examples: Fugitive Dust from Construction and Demolition, last revised April 2007.

SCAQMD, 2007b. Table XI-D: Mitigation Measure Examples: Fugitive Dust from Unpaved Roads, last revised April 2007.

United States Geological Survey (USGS), 2000. Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000.

Section 4.4, Biological Resources

4.4-37 *Impact 4.4-7, first paragraph, is revised as follows:*

Powerline electrocution is the result of two interacting factors: raptor behavior and structure pole design.

4.4-39 *The third bullet at the top of the page, pertaining to Mitigation Measure 4.4-7, is modified as follows:*

In areas with high avian collision risk, shield wires to minimize the effects from bird collisions consistent with APLIC guidelines.

4.4-40 *To reflect temporary impacts to waters of the United States and waters of the State, the first bullet for Mitigation Measure 4.4-9b is revised as follows:*

- Purchase or dedication of land to provide wetland preservation, restoration or creation. Temporarily disturbed waters of U.S. and waters of the State shall be restored in place at a 1:1 ratio (i.e., site restoration following construction). For permanent impacts, if on-site restoration is available and feasible, then a mitigation replacement ratio of at least 2:1 shall be used. If a wetland needs to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented.

4.4-42 *The fifth bullet under Mitigation Measure 4.4-10 is modified as follows:*

- Replace lost valley oaks or landmark trees at a 5:1 ratio within the City of Visalia, or fund the replacement of such trees by the City consistent with the City of Visalia Oak Tree Mitigation Policy (Visalia Municipal Code sections 12.24.037 and 12.24.110);

Section 4.5, Cultural Resources

- 4.5-5** *The second sentence of the second paragraph under Paleontological Setting is modified as follows:*

Nearer to the foothills of the Sierra Nevada, the Proposed Project and alternatives cross Mesozoic granitic, Mesozoic basic intrusive, and ~~pre-~~ pre-Cenozoic granitic and metamorphic rocks.

- 4.5-12** *The text under the Native American Contac heading has been clarified to read:*

Native American Contact

Contact was made with the NAHC in ~~November~~ late October 2005 and April 2007, in order to request a search of their Sacred Lands File (SLF) for the Proposed Project alignment. The NAHC responded on November 8, 2005, that there were no known sacred sites within the Proposed Project area. Contact was again made on April 4, 2007, due to a change in the project description. The NAHC responded on April 23, 2007, that again no Native American resources had been identified.

~~In~~ On January 2, 2008, a search of the SLF was requested for the Proposed Project and alternatives. The NAHC responded on January 3, 2008, that there were sacred sites within the project area, but ~~could~~ did not specify whether the sites were located near the Proposed Project or an alternative. A January 3, 2008 phone conversation between Pacific Legacy and Dave Singleton of the NAHC, Mr. Singleton confirmed that resources were known to exist in the area, but stated that only representatives of the Native American Community were authorized to disclose their location in relationship to the project area. In April 2009, a search of the SLF was requested for Alternative 6. The NAHC responded that no sacred sites were located within the Alternative 6 project area.

- 4.5-13** *The third paragraph under the Archaeological heading has been revised to read:*

All of the existing Big Creek 1-Rector and Big Creek 3-Rector transmission line ROW was surveyed, except for a small 0.25 mile segment south of Stokes Mountain. Portions of the proposed ROW for Alternative 3 and Alternative 2, and the majority of the alignment for the Proposed Project could not be systematically surveyed due to lack of landowner permission to access private property. Some of Alternative 3 was characterized by extremely steep slopes and could not be surveyed safely; survey of these areas was limited to those areas that personnel could safely access. The proposed ROW for Alternative 6 has not yet been systematically surveyed because it was added as a project alternative by the EIR team after the field work had been completed.

- 4.5-15** *The last paragraph on page 4.5-15, following onto page 4.5-16, has been revised as follows:*

According to the SSJVIC records search, seven one cultural archaeological resources and six historic resources were previously recorded as being within 0.5 miles of Alternative 6. Cultural resource CA-TUL-1976 is a large prehistoric site with extensive bedrock milling features, midden, and pictographs. It does not appear to be within the Alternative 6 alignment. All of these previously recorded sites are prehistoric milling stations or occupational sites. None of these sites appear to be within the Alternative 6 alignment.

The portions of Alternative 6 that are shared with Alternative 2 have been subject to systematic pedestrian archaeological survey; however, No archaeological survey has yet been conducted for the rest of the proposed ROW for Alternative 6.

During the 2007 field survey of the portions of Alternative 6 that are shared with Alternative 2, thirteen other cultural resources were recorded within the 200- to 300-foot-wide survey corridor, including nine that are located in the Alternative 6 alignment and may be impacted. These are PL-1, PL-2, PL-7, PL-9, PL-10, PL-13, PL-15, PL-30 and PL-42, described above. Two of the six historic resources, PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal), are within the Alternative 6 alignment.

- 4.5-16** *The last sentence of the first paragraph has been revised to read:*

The portions of Alternative 6 that are shared with Alternative 2 have been subject to systematic pedestrian archaeological survey; however, No archaeological survey has yet been conducted for the rest of the proposed ROW for Alternative 6.

- 4.5-19** *The typographical error in the second paragraph under Impact 4.5-1 has been corrected as follows:*

...Section ~~151246.4(b)(2)~~ 15064.(b)(4).

- 4.5-21** *The first sentence of the bottom paragraph is revised as follows:*

The Proposed Project would permanently remove approximately ~~31.4~~31.9 acres of Farmland, as described in Section 4.2, *Agricultural Resources*. Of this amount, ~~14.9~~16.2 acres are currently in citrus production.

- 4.5-31** *Starting with the second paragraph from the top, the following text has been revised:*

Other than the BCHSHD, ~~two~~ seven built historic resources are within the Alternative ~~3~~ 6 alignment that may be impacted by construction, which is ~~three~~

~~fewer two more~~ known historic resources than would be in the Proposed Project alignment.

Impact 4.5-ALT6-1: Implementation of Alternative 6 could adversely affect known and unknown historic resources along the Alternative 6 alignment. *Less than significant with mitigation (Class II)*

There are ~~six seven~~ historic resources located ~~within 0.5 miles of Alternative 6. Two of these, PL-30 (Cameron Creek Channel) and PL-42 (Tulare Irrigation Canal), are historic built resources and~~ within the Alternative 6 ROW: PL-2 (Matthews Ditch), PL-7 (St. John's River Levee), PL-9 (Watchumna Ditch), PL-10 (Mill Creek Levees), PL-15 (Remains of a historic ranch house), PL-30 (Cameron Creek Channel), PL-42 (Tulare Irrigation Canal). In addition, previously unknown historical resources may be present within portions of the Alternative 6 ROW, which has that have not been surveyed for cultural resources.

4.5-31 *Starting with the last full sentence on page 4.5-31, following onto page 4.5-32, the text has been revised as follows:*

~~There is one known archaeological resource~~ are nine archaeological resources within 0.5 miles of the Alternative 6 ROW. ~~This resource, CA-TUL-1976, is not within the Alternative 6 ROW. However, most~~ Much of the Alternative 6 alignment has never been archaeologically surveyed, and a greater portion of Alternative 6 runs through the more sensitive foothill areas than the Proposed Project. In addition, Alternative 6 runs through less developed land and therefore may contain a greater number of unrecorded archaeological resources.

Impact 4.5-ALT6-2: Implementation of Alternative 6 could adversely affect archaeological resources, including previously undocumented archaeological resources. *Less than significant with mitigation (Class II)*

~~While no archaeological resources are present within the Alternative 6 alignment, one resource, CA-TUL-1976, lies less than 0.5 miles from the alignment. There are nine archeological resources recorded within 0.5 miles of the Alternative 6 alignment. Two of these, PL-1 (historic debris scatter), and PL-13 (Prehistoric bedrock milling site), could potentially be located within the Alternative 6 project area. To determine whether these resources would be impacted by project construction, the location of the sites would have to be identified and mapped as described in Mitigation Measure 4.5-ALT6-2a, below. If these resources are within the Alternative 6 project area, they could be adversely impacted by construction activities.~~

Section 4.6, Geology, Soils, Seismicity, and Mineral Resources

No text changes have been made to Section 4.6, *Geology, Soils, Seismicity, and Mineral Resources*.

Section 4.7, Hazards and Hazardous Materials

4.7-4 *The following heading has been changed to read:*

Agricultural Aerial Spaying and Frost Control

4.7-4 *The following sentence has been added to the end of the first paragraph under the Agricultural Aerial Spraying heading:*

In addition to aerial applicators, slow-moving helicopters are sometimes used in the project area to protect crops from frost by circulating warm air near the crops.

4.7-16 *Mitigation Measure 4.7-3b is clarified as follows:*

Mitigation Measure 4.7-3b: SCE shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on currently or historically-farmed land in agricultural areas that would be disturbed during construction of the Proposed Project. The Plan shall be prepared in consultation with the County Agricultural Commission, and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory requirements shall be submitted to the CPUC at least one week prior to construction activities in the area to be disturbed.

4.7-18 *The following changes have been made to the Impact 4.7-6 discussion:*

Impact 4.7-6: The Proposed Project could create a safety hazard to aerial spray applicators and frost protection helicopter pilots. *Less than significant with mitigation (Class II)*

The primary reason that transmission lines and towers are a safety hazard for aerial applicators and frost protection helicopter pilots is because they present an additional obstacle for pilots to avoid. The following discussion describes the specific circumstances that present a safety hazard to aerial applicators and frost protection helicopter pilots. New transmission lines are especially hazardous when they are: diagonally oriented, relative to field boundaries; exist side-by-side with other transmission lines; create an angle perpendicular to an existing line; constructed within a new utility ROW; and when they are not clearly visible.

The Proposed Project would represent a potentially significant hazard to aerial sprayers and frost protection helicopter pilots because it would create a right angle to the existing Big Creek-Rector transmission lines within an agricultural use, and it would result in approximately 15.5 miles of new 120-foot to 160-foot poles/towers and conductors within or immediately adjacent to existing agricultural fields, orchards, and vineyards where no such structures currently exist.

Because of the infrequent nature of aerial spraying and frost protection using helicopters in the study area, pilots may fly over agricultural fields that they have not been to in six months or longer. In those cases, pilots could have no previous knowledge that a new transmission line and towers have been constructed, which creates an increased danger for pilots. To ensure pilot notification of the new transmission line, the following mitigation measure shall be implemented.

4.7-18 *Mitigation Measure 4.7-6 is revised to change the map coverage to a 10-mile wide corridor centered on the final alignment:*

Mitigation Measure 4.7-6: SCE shall ~~consult with~~ contact landowners to determine which aerial applicators and helicopter pilots that offer frost protection cover agricultural parcels within one mile of the approved transmission line ROW. SCE shall provide written notification to all aerial applicators and helicopter pilots that offer frost protection stating when the new transmission line and towers would be erected. SCE shall also provide all aerial applicators and helicopter pilots that offer frost protection that operate in the area recent aerial photos or topographic maps clearly showing the location of the new lines and towers, as well as all existing SCE lines and towers within ~~to~~ 5 miles on each side of the approved corridor. The photos or maps shall also indicate the heights of the towers and conductors. SCE shall provide documentation of compliance to the CPUC.

4.7-22 *Impact 4.7-10 has been supplemented as follows:*

Impact 4.7-10: Electric fields associated with the operation of the Proposed Project could affect cardiac pacemakers and implantable defibrillators, resulting in ventricular fibrillation. *Less than significant (Class III)*

4.7-22 *The following paragraphs have been added to the Impact 4.7-10 discussion before the last paragraph on page 4.7-22.*

The electric field associated with the proposed new transmission lines may also be of sufficient magnitude to impact operation of implanted defibrillators. For defibrillators, the inability to sense normal endogenous electrical activity, due to interference from external fields, could be interpreted by the unit as a state of fibrillation, leading to an inappropriate discharge that the wearer may sense as a “jolt” (or alternatively, it could lead to withholding a needed discharge for some

period of time). An inappropriate defibrillating pulse occurring at a particular time called the “vulnerable” period in the cardiac cycle could itself trigger ventricular fibrillation. For the most part, these defibrillator anomalies are reversible, with the devices returning to normal operation upon removal of the electrical interference. The magnetic field threshold for interference with defibrillators is about 2 G or higher and depending on the unit and based on design characteristics, it is anticipated that the electric field threshold for defibrillators would be above 2 kV/m (EPRI, 1997).

As with pacemakers, the precise coincidence of an individual to be exposed to high electric fields within the transmission line ROW and a biological need of that individual for the full function of his/her defibrillator would appear, in general, to be a rare event.

4.7-22 *The last paragraph under the Impact 4.7-10 discussion has been modified as follows.*

Given the rarity of an exposure event to occur simultaneously with a biological need for full function pacemakers or defibrillators, it would be unlikely that the transmission line’s electric field would cause a harmful interference to the operations of implanted cardiac devices; therefore, impacts would be less than significant.

4.7-23 *The last sentence of Mitigation Measure 4.7-11a has been clarified as indicated below:*

Mitigation Measure 4.7-11a: As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, and pipelines, that are within and near the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE’s standards. The identification of objects that have the potential for induced voltages shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.

4.7-23 *Mitigation Measure 4.7-11b has been clarified as follows:*

Mitigation Measure 4.7-11b: Prior to construction, SCE shall coordinate with affected property owners to conduct an inventory of the groundwater wells (including wagon-wheel type wells) that are within the proposed ROW. To the extent feasible, SCE shall adjust the proposed ROW such that the centerline of the ROW shall be no closer than 50 linear feet from any existing well. Where adjusting the ROW is not feasible (either technically or economically), SCE shall proceed as follows:

Wagon-Wheel Wells. It would not be feasible to, and Cal OSHA regulations would not permit one to, install or relocate a wagon-wheel type well. For this reason, SCE shall adjust the spacing and/or height of adjacent tower or pole structures to provide sufficient vertical clearance such that well maintenance activities may be safely conducted on any wagon-wheel well within the ROW. Safe working clearances shall be

determined as identified in Cal OSHA Title 8 of the California Code Section 2946, considering the maximum line sag at the well location(s) as well as the minimum height of equipment (e.g., boom trucks) that would be required to perform well maintenance activities.

Other Groundwater Wells. Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the maximum line sag at the well locations as well as the minimum height of equipment (e.g., boom trucks) that would be required to perform well maintenance activities, SCE shall identify wells that would not have the required minimum ~~ground~~ vertical clearance to safely perform any necessary well maintenance and that could not be provided with adequate vertical clearance by adjusting the spacing and/or height of adjacent tower or pole structures. ~~and~~ For those wells where adequate vertical clearance is not feasible (either technically or economically), SCE shall engage a ~~qualified water well drilling contractor well driller~~ licensed in the State of California (C-57 Well Driller's License) to relocate those identified wells to another location. Well relocation shall include all drilling and well development activities, including relocating the associated pumping equipment and pipeline to the new location.

Prior to well relocation, it shall be demonstrated that the new location is capable of producing water of equal quantity and quality. For the existing well a steady-state pump test shall be conducted, once in February or March and once in early October (prior to well relocation), to determine the existing average yield of the well. Also, water quality testing of the existing well shall be performed after each of the pump-tests. Measured water quality parameters shall include pH, total suspended solids (TSS), total dissolved solids (TDS), and nitrates. Equivalent water quantity and quality testing (i.e., same tests, performed once in February or March and once in early October) shall be performed, using a properly installed, temporary monitoring well, at the new prospective well location. The average yield and water quality at the new prospective well location shall be at least equal to (if not better than) the existing well location; such a comparison shall be made based upon the testing specified in this mitigation measure. If the yield and quality at the new prospective well location are demonstrated to be at least equivalent to the existing well location, then a permanent well shall be installed at the new location; otherwise, a new prospective well location shall be identified and the same testing procedures shall be repeated until an adequate location is identified. All testing shall be conducted or overseen by a California-registered hydrogeologist. A report summarizing all water quantity and quality testing shall be submitted by a California-registered hydrogeologist to the California Public Utilities Commission and otherwise be made publicly available. The report shall include a detailed description of testing approach, methodology, duration, and results. Abandonment of ~~the old-existing~~ wells shall be conducted in accordance with all applicable well standards (DWR, 1991). All wells shall be relocated prior to electrifying the transmission line.

Section 4.8, Hydrology and Water Quality

4.8-17 *The following changes have been incorporated into Mitigation Measure 4.8-2:*

Mitigation Measure 4.8-2: If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), SCE and/or its contractor ~~shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with State hazardous waste disposal requirements.~~ will stop work and call SCE's Regional Spill Response Coordinator to the site to make an immediate assessment. The property owner would be notified as well as the Tulare County Health Department, and the Tulare County Health Department would coordinate oversight of the cleanup.

Section 4.9, Land Use, Planning, and Policies

4.9-1 *The last paragraph under the Existing Land Uses, Proposed Project heading has been clarified as follows:*

The substations (i.e., Rector, Springville, Vestal, and Big Creek 3) that would receive electrical and safety upgrades as part of the Proposed Project and alternatives are located on land currently used by SCE for utility~~industrial~~ purposes.

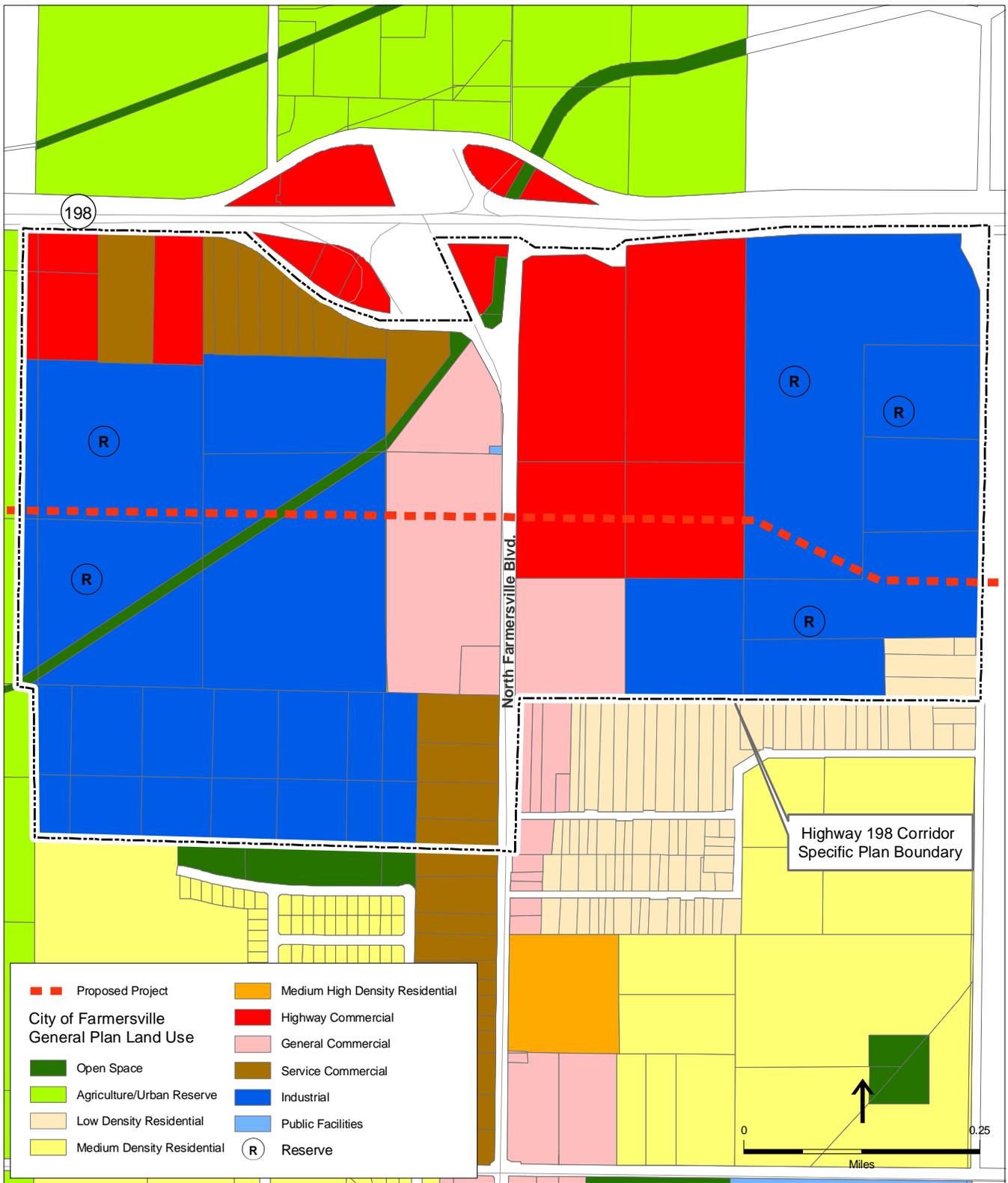
4.9-6 *The first paragraph under the Tulare County Zoning Ordinance heading is revised as follows:*

The Proposed Project would traverse parcels with *Exclusive Agricultural (AE-20 and AE-40), Foothill Agricultural (AF), Agricultural (A-1), Planned Development (PD), ~~Scenic Corridor Combining (SC), Special Mobile Home (M), and Service Commercial (C-3)~~ zoning designations, and one parcel zoned Scenic Corridor Combining (SC).*

4.9-10 *Under the City of Farmersville General Plan heading, the fourth sentence in the first paragraph has been revised to reflect the City of Farmersville's updated land use and zoning designations:*

The Proposed Project would traverse land designated by the City of Farmersville General Plan for *Agriculture/Urban Reserve, Industrial, ~~and General Commercial, and Highway Commercial~~ uses (Figure 4.9-4) (City of Farmersville, 2002; City of Farmersville, 2009).*

4.9-11 *Figure 4.9-4 is revised as follows to reflect the City of Farmersville's updated land use and zoning designations:*



SOURCE: SCE, 2008; City of Farmersville, 2003b/2009

San Joaquin Cross Valley Loop Transmission Project. 207584.01

Figure 4.9-4
City of Farmersville General Plan Land Uses

- 4.9-12** *An additional zoning designation has been added after the last sentence of top paragraph, as follows:*

...as determined by the City's Zoning Ordinance (City of Farmersville, 2002). The Highway Commercial designation is intended to provide for commercial uses that cater to the traveling public along State Route 198, such as service stations, convenience stores, restaurants and lodging establishments. As determined by the City's Zoning Ordinance, development within this designation must be landscaped, off-street parking must be provided, signs must be regulated and new uses or extensive expansion of existing uses require review or a conditional use permit (Crumly, 2009).

- 4.9-12** *The first paragraph under the City of Farmersville Highway 198 Corridor Specific Plan heading has been revised as follows:*

Within the City of Farmersville's limits, the Proposed Project would traverse the area included in the City of Farmersville Highway 198 Corridor Specific Plan, adopted on June 23, 2003 and amended on May 11, 2009, which is depicted in Figure 4.9-4 (City of Farmersville, 2003a; City of Farmersville, 2009).

- 4.9-12** *The second to last paragraph on page 4.9-12 has been revised as follows:*

The Proposed Project would traverse land designated as Industrial, and General Commercial, and Highway Commercial. The definitions and limitations of the Industrial, and General Commercial, and Highway Commercial land uses in the Specific Plan are the same as in the City of Farmersville General Plan, described earlier in this document.

- 4.9-13** *The text under the City of Farmersville Zoning Ordinance heading has been revised as follows:*

The Proposed Project would traverse land zoned by the City of Farmersville as Urban Reserve (U-R), General Commercial (C-G), Industrial (I), and Highway Commercial (C-H) (Crumly, 2008 City of Farmersville, 2009). The current 2007 City of Farmersville Zoning Ordinance provides information regarding allowable uses and development standards within this the General Commercial and Industrial zoning designations. ~~The purpose of the Urban Reserve designation is to "preserve an agricultural or open space use, land suited to eventual development in other uses until such time as streets, utilities and other community facilities may be provided or programmed so as to ensure the orderly and beneficial conversion of these lands to non-agricultural use, and to provide appropriate areas for certain predominantly open uses of land which are not injurious to agricultural uses"~~ The purpose of the General Commercial designation is "to provide a general commercial area for the sale of

commodities or the performance of services to serve the entire community.”
The purpose of the *Industrial* designation is “to encourage sound industrial development by providing areas exclusively for such development subject to regulations necessary to insure [sic] the protection of adjoining uses” (City of Farmersville, 2007). The City of Farmersville implemented the *Highway Commercial* zoning designation in 2009. The purpose of the *Highway Commercial* designation is “to establish appropriate areas along Highway 198 for the development of commercial uses that cater to the traveling public, such as restaurants, service stations, lodging, retail commercial and complementary uses. Recognizing the high-profile location of Highway Commercial properties and the city’s frontage along the highway as its ‘front door to the world’, property development should exhibit the highest level of design quality, including architectural character, landscaping and screening” (City of Farmersville, 2009).

- 4.9-14** *To provide clarification, the fifth sentence under Impact 4.9-1 has been revised to read:*

However, within the urban development boundary of Lemon Cove, all homes in Lemon Cove would be located on the north side of the alignment, and there are no buildings currently located to the south of the Proposed Project alignment.

- 4.9-15** *The first sentence under the Tulare County Zoning Ordinance heading has been clarified as follows:*

Tulare County Zoning Ordinance. The Proposed Project would traverse parcels zoned by the Tulare County Zoning Ordinance as *AE-20* and *AE-40*, *AF*, *A-1*, *PD*, ~~*SC*~~, ~~*M*~~, and *C-3*, and one parcel zoned *SC* (Tulare County, 1999).

- 4.9-16** *Pages 4.9-16 to 4.9-17 have been revised as follows to reflect the City of Farmersville’s updated land use and zoning designations:*

City of Farmersville General Plan. The Proposed Project would traverse land designated by the City of Farmersville General Plan for *Agriculture/Urban Reserve*, *Industrial*, and *General Commercial*, and *Highway Commercial* uses (City of Farmersville, 2002). The General Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Zoning Ordinance. The Proposed Project would traverse lands designated by the City of Farmersville Zoning Ordinance as ~~*UR*~~ *C-G*, *I*, and *C-H* (~~Crumly, 2008~~ City of Farmersville, 2009). Section 17.56.0240,

Table 2 of the Farmersville Zoning Ordinance specifies the conditions under which Conditional Use Permits are required for ‘Communication and Public Utility Service Facilities’ (City of Farmersville, 2007~~9a~~). According to the Table, ‘Communication and Public Utility Service Facilities’ are ~~not~~ permitted in ~~*U-R*~~ ~~*C-H*~~ and ~~*C-G*~~ zones, with a conditional use permit. The zoning ordinance does not indicate whether such facilities are permitted in *I* zones. ~~However, according to a City of Farmersville planning consultant, transmission lines are, in fact, allowed under certain conditions in *U-R* zones, and the Zoning Ordinance should be amended to list ‘Communication and Public Utility Service Facilities’ as consistent with the *U-R* designation (Schoettler, 2008).~~ Regardless, the project applicant would, in accordance with General Order 131-D, obtain input from Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

City of Farmersville Highway 198 Corridor Specific Plan. The Proposed Project would traverse land designated by the City of Farmersville Highway 198 Corridor Specific Plan for ~~*Industrial, and General Commercial, and Highway Commercial*~~ uses (City of Farmersville, 2003b; City of Farmersville, 2009). The Specific Plan does not discuss the allowance or disallowance of transmission line facilities within these land use designation (Schoettler, 2008). However, the project applicant would, in accordance with General Order 131-D, obtain input from the City of Farmersville regarding land-use matters related to the siting of the Proposed Project prior to project construction.

4.9-22 *The following references are added to Section 4.9, Land Use Planning and Policies:*

City of Farmersville, 2009. Resolution 2009-56, Amendments to the General Plan Land Use Map and the Highway 198 Specific Plan Land Use Map to Implement Objectives and Policies of the 2002 Farmersville General Plan and Highway 198 Specific Plan, and to Ensure Consistency Between Land Use and Zoning Designations. Adopted May 11, 2009.

Crumly, 2009. Sara Crumly, Management Analyst, City of Farmersville. Personal communication October 13 and 15, 2009.

Section 4.10, Noise

4.10-12 *Under the Construction heading, the last sentence in the first paragraph is corrected as follows:*

...Fresno County restricts construction hours to between the hours of six ~~p.m.~~ a.m. and nine p.m. on weekdays and between the hours of seven a.m. and five p.m. on Saturdays and Sundays.

4.10-13 *The discussion under Impact 4.10-1 is clarified as follows:*

Impact 4.10-1: Blasting activities could expose people and/or structures to substantial vibration levels. *Less than significant with mitigation (Class II)*

Blasting activities may be required during road construction, grading, and foundation work in some locations if rock is present. Blasting activities typically generate the most noticeable vibrations associated with construction activities. Ground motion at levels not exceeding 0.5 PPV will not damage buildings, buried utilities, rock slopes, or any other facilities. For comparison, a person walking on the ground or floor of a structure will often generate motion exceeding 0.15 PPV and normal temperature and humidity changes create much higher strains in building materials (Revey, 2003). Areas where blasting would be utilized have not been determined; therefore, it is ~~difficult not possible to assess the potential~~ identify specific impacts on sensitive receptors and existing structures from groundborne vibration that would be caused by blasting activities . . .

4.10-13 *To clarify the intent of Mitigation Measure 4.10-1, the text is revised as follows:*

Mitigation Measure 4.10-1: If it is determined that blasting would be required, SCE and/or its contractors shall develop and implement a Blasting Plan for construction activities. The plan shall be submitted for review and approval by the CPUC...

4.10-13 *The second bullet of Mitigation Measure 4.10-1 is clarified to add a specific vibration and settlement threshold:*

- A Blast Survey Workplan shall be prepared by the blaster. The Plan shall establish a vibration and settlement PPV threshold criteria limits of 0.5 inches per second (in/s) in order to protect structures from blasting activities, and shall identify specific monitoring points. At a minimum, a pre-blast survey shall be conducted of any potentially affected structures and underground utilities within 500 feet of a blast area, as well as the nearest commercial or residential structure, prior to blasting.

4.10-14 *The seventh bullet of Mitigation Measure 4.10-1 is clarified to eliminate redundancy:*

- ~~Vibration and settlement threshold criteria (for example PPV of 0.2 inches per second) shall be submitted by the blaster to the CPUC for review and approval during the design process. If the settlement or vibration and settlement criteria of 0.5 in/s PPV are~~ is exceeded at any time or if damage is observed at any of the structures or utilities, then blasting shall immediately cease and the CPUC immediately notified. The stability of any structures, creek canals, etc. shall be monitored and any evidence of instability due to blasting operations shall result in immediate termination of blasting. The blaster shall modify the blasting procedures or use alternative means of excavating in order to reduce the vibrations to below the threshold values, prevent further settlement, slope instability, and/or to prevent further damage.

4.10-16 *The third sentence in the second paragraph is revised as follows:*

Based on the analysis of a similar project, operation of a light-duty helicopter can be expected to generate noise levels of approximately 80 dBA at 200 feet (CPUC, 2006). These noise levels would have the potential to impact nearby sensitive receptors. However, as stated in Chapter 2, Project Description, helicopters would be used solely for conductor stringing and would only be used for approximately 26 days. The helicopter would operate along different portions of the line each day; therefore no single receptor would be exposed to noise from helicopters for an extended period of time. Furthermore, helicopter flight paths would be primarily along the ROW and to and from staging areas. Implementation of Mitigation Measure 4.10-4a would ensure that residents are notified prior to activities, thereby reducing the impacts on receptors to less than significant.

4.10-16 *The text on the bottom of page 4.10-16 to the top of page 4.10-17 is clarified as follows:*

If nighttime (e.g., between 8:00 p.m. and 6:00 a.m.) construction activities are determined to be necessary, such activities could result in a significant nuisance to nearby residences. Nighttime construction activities may interfere with sleep and as a result may cause physiological and psychological stress.

4.10-17 *Mitigation Measure 4.10-4a is clarified as follows:*

Mitigation Measure 4.10-4a: SCE and/or its contractors shall employ the following noise reduction and suppression techniques during project construction to minimize the impact of temporary construction-related noise on nearby sensitive receptors:

- All construction equipment mufflers comply with manufacturers' requirements. If impact equipment such as jack hammers, pavement breakers, and rock drills are used during construction, hydraulically or electric-powered equipment shall be used whenever feasible to reduce noise associated with compressed-air exhaust from pneumatically powered tools. However, where pneumatically powered tool use is unavoidable, the construction contractor shall place exhaust mufflers on the compressed-air exhaust and external jackets on the tools themselves where feasible.
- Nearby residents shall be notified of the construction schedule and how many days they may be affected by construction noise prior to commencement of construction activities. Notification during conductor stringing activities that include helicopter usage shall include a schedule of predicted hovering times and locations as well as helicopter flight paths. Notices sent to residents shall include a project hotline where residents would be able to call and issue complaints. All calls shall be returned by SCE and/or its contractor within 24 hours to answer noise

questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC weekly.

- Idling of engines shall be minimized; engines shall be shut off when not in use except in cases where idling is required to ensure safe operation of equipment or when idling is necessary to accomplish work for which the piece of equipment was designed (such as operating a crane).
- Compressors and other small stationary equipment shall be shielded with portable barriers when operated within 100 feet of residences.
- Equipment staging and parking areas shall be located as far as feasible from residential schools and buildings.
- Haul truck operations and helicopter operations shall be prohibited during the evening and nighttime hours between 8:00 p.m. and 6:00 a.m.

4.10-20 *The second sentence under the Alternative 2 heading is clarified as follows:*

However, Alternative 2 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

4.10-21 *The second sentence under the Alternative 3 heading is clarified as follows:*

Alternative 3 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

4.10-21 *The second sentence under the Alternative 6 heading is clarified as follows:*

Alternative 6 would pass by a ~~greater number of~~ approximately three times as many residential receptors than the Proposed Project . . .

Section 4.11, Population and Housing

No text changes have been made to Section 4.11, *Population and Housing*.

Section 4.12, Public Services

No text changes have been made to Section 4.12, *Public Services*.

Section 4.13, Recreation

4.13-2 *The sentence at the top of page 4.13-2 is corrected as follows:*

Located approximately one-half mile north of the Proposed Project, Kaweah Oaks Preserve in ~~the City of Exeter~~ unincorporated Tulare County is a 324-acre property that contains the largest protected example of Great Valley oak riparian forest within the Kaweah River Delta.

4.13-2 *The following text has been added to the end of the Local Parks, City of Visalia section:*

The park would be 100 acres, with a planned build-out date of 2012 (Shepard, 2008).

The City also has two designated trails in the vicinity of Alternatives 2, 3 and 6. The St. Johns River Trail is located on the levee of the St. John's River. The trail traverses the northern portion of the City of Visalia from Riggin Avenue to approximately 400 feet east of the existing SCE transmission line for a distance of roughly three miles. The path follows the levee on the south side of the river primarily as an asphalt trail, although the easternmost 400 feet is composed of asphalt grindings. Trail users consist of bicyclists and pedestrians, as well as school children traveling to and from Golden West High School and Valley Oak Middle School. A city parks representative estimates that the average use of the trail is between 50 and 75 bicyclists and pedestrians per day, not including school children (Shepard, 2009).

The Mill Creek trail runs a distance of approximately 0.4 miles along the south side of Mill Creek between McAuliff Street and the existing SCE ROW. The trail is a wide dual-use concrete sidewalk designed to be used for pedestrians and bicyclists. A park representative estimates that the average use is approximately 20 people per day, including bicyclists and pedestrians (Shepard, 2009).

4.13-3 *The final sentence in the first paragraph is revised as follows:*

The City of Farmersville does not have a system of bike paths, and as of 2008 had no plans for such a system; however, the City of Farmersville General Plan Circulation Element, page 3-27, states that the City of Farmersville has been participating with the Tulare County Association of Governments in developing a County-wide bicycle route plan. The General Plan notes that the plan is in draft stage and identifies four future bicycle routes, including Farmersville Boulevard and Road 168 in the project area (Martinez, 2008; City of Farmersville, 2002).

4.13-4 *The text under the City of Visalia Waterways and Trails Master Plan heading has been revised as follows:*

The City of Visalia Waterways and Trails Master Plan is a map that includes existing and future parks, bike paths and trails, as well as potential rest and staging areas. As discussed in the Setting, Cutler Park (a County owned and operated park), as well as the St. Johns River Trail and the Mill Creek Trail (City owned and operated trails) would be located in the vicinity of the Proposed Project and alternatives...

4.13-7 *The Alternative 2 analysis has been revised as follows:*

Like the Proposed Project, Alternative 2 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. ~~Compared to the Proposed Project,~~ Alternative 2 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. ~~Compared to the Proposed Project,~~ Alternative 2 would require the removal of an additional 158 existing towers and the construction of an additional 44 towers and poles. As such, total project construction of Alternative 2 is estimated to be approximately 20 months, which is eight months longer than the Proposed Project. Construction of Alternative 2 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park; school children using the trail as a path to and from school would enter and exit the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and ~~However, the additional time necessary for construction of Alternative 2 would~~ not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 2 would be less than significant (Class III).

4.13-7 *The Alternative 3 analysis has been revised as follows:*

Like the Proposed Project, Alternative 3 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Alternative 3 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. ~~Compared to the Proposed Project,~~ Alternative 3 would require the removal of an additional 216 existing towers and the construction of an additional 79 towers and poles, ~~compared to the Proposed Project.~~ Consequently, total project construction of Alternative 3 is estimated to be approximately 24 months, which is 12 months longer than the Proposed Project. Construction of Alternative 3 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park; school children using the trail as a path to and from school would enter and exit

the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and
~~However, the additional time necessary for construction of Alternative 3 would~~ not result in substantial physical deterioration of recreational facilities. Therefore, like the Proposed Project, impacts to recreational resources resulting from implementation of Alternative 3 would be less than significant (Class III).

4.13-7 *The Alternative 6 analysis has been revised as follows:*

Like the Proposed Project, Alternative 6 would not contain a residential component that would result in an increased use of existing recreational facilities, and would not include or require the construction or expansion of recreational facilities. Alternative 6 would be located in the vicinity of two bike and pedestrian trails in the City of Visalia not crossed by the Proposed Project: the St. Johns River Trail and the Mill Creek Trail. Compared to the Proposed Project, it is estimated that Alternative 6 would require the removal of more existing towers and the construction of more poles, though it would require the construction of fewer towers. Total project construction of Alternative 6 is estimated to be approximately 16 months, which is four months longer than the Proposed Project. Construction of Alternative 6 may require temporary closure of the St. Johns River Trail and the Mill Creek Trail, particularly during stringing of the conductors. However, such closures would not impact individuals using the trails as a travel route. The St. John's River trail ends approximately 400 feet east of the existing ROW, and does not connect to a major road or City park; school children using the trail as a path to and from school would enter and exit the trail to the west of the ROW (Shepard, 2009). The Mill Creek Trail ends at the existing ROW. Upon completion of construction, the trails would be returned to pre-construction conditions. Therefore, impacts would be temporary, and
~~However, the additional time necessary for construction of Alternative 6 would~~ not result in substantial physical deterioration of recreational facilities. Therefore, impacts to recreational resources resulting from implementation of Alternative 6 would be less than significant (Class III).

4.13-8 *The following reference has been corrected as follows:*

Shepard, Paul, 2008. Management Analyst, City of ~~Farmersville~~ Visalia
 Department of Parks and Recreation. Phone conversation November 21, 2008 and December 30, 2008.

4.13-8 *The following reference has been added to Section 4.13, Recreation:*

Shepard, 2009. Paul Shepard, Management Analyst, City of Visalia
 Department of Parks and Recreation. Personal correspondence
 October 12, 2009 and October 13, 2009.

Section 4.14, Transportation and Traffic

4.14-7 *The second sentence of Mitigation Measure 4.14-1b has been modified as follows:*

Mitigation Measure 4.14-1b: SCE shall prepare and implement a Traffic Management Plan subject to approval of Caltrans and/or the applicable local government(s). The approved Traffic Management Plan and documentation of agency approvals, including Caltrans and local encroachment permits, shall be submitted to the CPUC prior to the commencement of construction activities. At a minimum, the plan shall...

Section 4.15, Utilities and Service Systems

No text changes have been made to Section 4.15, *Utilities and Service Systems*.

Chapter 5. Comparison of Alternatives

5-2 *The bottom paragraph has been revised as follows:*

Significant unmitigable impacts on agricultural resources under the Proposed Project are identified as the permanent removal of ~~31.131.9~~ acres of Farmland (e.g., ~~16.116.8~~ acres of Prime Farmland, ~~0.714.4~~ acres of Farmland of Statewide Importance, ~~14.30.7~~ acres of Unique Farmland). Alternatives 2, 3, and 6 would also result in the permanent removal of ~~Prime, Important or Unique~~ Farmland, but the acreages vary by alternative (Table 5-1). Comparatively, the Proposed Project would result in the permanent removal of ~~31.131.9~~ acres of Farmland while Alternatives 2, 3, and 6 would result in the permanent removal of ~~23.925.6~~ acres, ~~16.718.2~~ acres, and ~~30.731.6~~ acres respectively.

5-3 *Table 5-1 has been modified as follows:*

Alternative	Significant (Class I) Impacts
Proposed Project	<p>The Proposed Project would result in permanent removal of 31.131.9 acres of Farmland (e.g., 16.116.8 acres of Prime Farmland, 0.714.4 acres of Farmland of Statewide Importance, and 14.30.7 acres of Unique Farmland).</p> <p>Proposed Project would result in the conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the right-of-way (ROW) would cause walnut orchards to become unproductive.</p> <p>The Proposed Project would result in alterations to elements of the Big Creek Hydroelectric System Historic District.</p>
Class I Impacts Eliminated or Created by Alternatives	
Alternative 2	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 23.925.6 acres of Farmland (e.g., 9.510.0 acres of Prime Farmland, 0.615.0 acres of Farmland of Statewide Importance, and 13.80.6 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

Alternative	Significant (Class I) Impacts
Alternative 3	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 46-718.2 acres of Farmland (e.g., 6-66.9 acres of Prime Farmland, 0-010.3 acres of Farmland of Statewide Importance, and 9-21.1 acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p> <p>Substantial adverse impact to northern claypan vernal pool habitat that is protected in the Stone Corral Ecological Reserve.</p> <p>Significant effects to jurisdictional waters of the United States and waters of the State, including drainages and seasonal wetlands</p>
Alternative 6	<p>Significant unmitigable impacts on agricultural resources include the permanent removal of 30-731.6 acres of Farmland (6-77.1 acres of Prime Farmland, 24-024.5 acres of Farmland of Statewide Importance, and zero acres of Unique Farmland).</p> <p>Same conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive.</p> <p>Same significant unmitigable impacts to elements of the Big Creek Hydroelectric System Historic District as Proposed Project.</p>

5-4 Table 5-2, second row, has been modified as follows:

Agricultural Resources	Impacts determined to be significant unmitigable impacts to agricultural resources.	Impacts would be similar to Proposed Project but to a lesser degree.	Impacts would be similar to Proposed Project but to a lesser degree.	Impacts would be similar to Proposed Project but to a lesser degree.
	<p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 46-116.8 acres of Prime Farmland; • 0-714.4 acres of Farmland of Statewide Importance; and • 44-30.7 acres of Unique Farmland. • TOTAL = 34-431.9 acres <p>Less than significant impacts would include permanently removing 29 acres of Farmland that supports walnut orchards from production.</p> <p>Most impacts on agriculture</p>	<p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 9-510.0 acres of Prime Farmland; • 0-615.0 acres of Farmland of Statewide Importance; and • 43-80.6 acres of Unique Farmland. • TOTAL = 23-925.6 acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>	<p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 6-66.9 acres of Prime Farmland; • 0-910.3 acres of Farmland of Statewide Importance; and • 9-21.1 acres of Unique Farmland. • TOTAL = 46-718.2 acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p> <p>Least impacts on agriculture</p>	<p>Significant unmitigable impacts would include permanent removal of:</p> <ul style="list-style-type: none"> • 6-77.1 acres of Prime Farmland; • 24-024.5 acres of Farmland of Statewide Importance; and • 0 acres of Unique Farmland. • TOTAL = 30-731.6 acres <p>Less than significant impacts would include permanently removing 12 acres of Farmland that supports walnut orchards from production.</p>

5-7 *The first bullet on page 5-7 has been revised as follows:*

- **Agricultural Resources** – Impacts would be significant and unmitigable for all alternatives. Compared to the Proposed Project, Alternative 3 would permanently remove the least amount of Farmland, followed by Alternative 2 and then Alternative 6. ~~All three alternatives would remove approximately one half the acreage of walnut orchards that would be removed from production under the Proposed Project.~~

5-8 *The third and fourth sentences under Section 5.4.2 are revised as follows:*

The Environmentally Superior Alternative would have ~~two~~one significant unmitigable (Class I) impacts on agricultural resources and one significant unmitigable impact on cultural resources. ~~The~~ Impacts on agricultural resources would include permanent removal of ~~23.9~~25.6 acres of Farmland (e.g., ~~9.5~~10.0 acres of Prime Farmland, ~~0.6~~15.0 acres of Farmland of Statewide Importance, and ~~13.8~~0.6 acres of Unique Farmland) ~~and conversion of Farmland to non-agricultural uses in areas where height restrictions of crops within the ROW would cause walnut orchards to become unproductive....~~

Chapter 6. CEQA Statutory Sections

6-5 *To be consistent with Draft EIR Section 4.4, the final sentence on page 6-5 has been modified to the following:*

Construction of the Proposed Project could result in both temporary impacts on special-status species (i.e., Kaweah brodiaea, Hoover's spurge, ~~striped adobe lily, San Joaquin Valley Orcutt grass, San Joaquin adobe sunburst, Greene's tuftoria, recurved larkspur, spiny-sealed button celery,~~ valley elderberry longhorn beetle, burrowing owl, San Joaquin kit fox, Swainson's hawk and golden eagle) and their habitat.

Chapter 8. Mitigation Monitoring, Reporting, and Compliance Program

All text changes to Draft EIR Chapter 8, *Mitigation, Monitoring, Reporting and Compliance Program*, are shown in Appendix H.

Appendix B. Electric and Magnetic Fields (EMF)

All text changes to Appendix B pertain to Section 1.

B-1 *The following sentence in the first paragraph of Appendix B Section 1 has been modified as requested:*

Units of measure are Gauss (G) or milliGauss (mG, ~~+~~one 1,000 of a Gauss).

B-2 *To more accurately reflect the exemptions identified in EMF Design Guidelines for Electrical Facilities (July 21, 2006; page 11), the EMF guidelines exemption criteria discussion on the bottom of page 2 and the top of page 3 have been modified as follows:*

~~Utilities may use the following guidelines to determine those specific types of projects that will be exempt from no/low cost field reduction:~~

- ~~1. Operation, repair, maintenance replacement or minor alteration of existing structures, facilities or equipment.~~
- ~~2. Restoration or rehabilitation of deteriorated or damaged structures, facilities or equipment to meet current standards of public safety.~~
- ~~3. Addition of safety devices.~~
- ~~4. Replacement or reconstruction of existing structures and facilities on the same site and for the same purpose as the replaced structure or facility.~~
- ~~5. Emergency restoration projects.~~
- ~~6. Re-conductoring projects except when structures are reframed or reconfigured.~~
- ~~7. Projects located on land under the jurisdiction of the Forest Service, Bureau of Land Management or other governmental agency.~~
- ~~8. Privately owned tree farms.~~
- ~~9. Agricultural land within the Williamson Act.~~
- ~~10. Areas not suited to residential/commercial development. Such areas might include steep slopes, areas subject to flooding or areas without access to public facilities.~~

~~The intent of the exemption criteria is to exclude two types of projects. The first type of projects are those that either replace or make minor additions or modifications to existing facilities. This will include pole replacements or relocations less than 2,000 feet in length. Those projects where more than 2,000 feet of line is relocated or reconstructed or where the circuit is reinsulated or reconfigured should be considered for low cost magnetic field management techniques.~~

~~The second type projects are those located in undeveloped areas.~~

The following criteria have been developed to determine those transmission and substation projects that would be exempted from the requirement for consideration of no-cost and low-cost magnetic field reduction measures:

1. Emergency – All work required to restore service or remove an unsafe condition.
2. Operation & Maintenance – Washing and switching operations; replacing crossarms, insulators, or line hardware; replacing deteriorated poles; maintaining underground cable and vaults; replacing line and substation equipment with equipment serving the same purpose and with similar ratings; and repairing line and substation equipment.
3. Relocations – Line relocation of up to 2000 feet; and installation of guy poles or trenching poles only.
4. Minor Improvements – Addition of safety devices; reconductoring up to 2,000 feet, where changing polehead configuration is not required; installation of overhead switches; insulator replacement; modification of protective equipment and monitoring equipment; and intersetting of additional structures between existing support structures.
5. Projects located exclusively adjacent to undeveloped land—including land under the jurisdiction of the National Park Service, the State Department of Parks and Recreation, U.S. Forest Service, or Bureau of Land Management (BLM).

B-3 *The third, fourth, and fifth EMF reduction items on pages 3 and 4 have been revised as follows:*

3. ~~Mitigation~~ Field reduction measures should not compromise the reliability, operation, safety or maintenance of the system.
4. Total cost of ~~mitigation~~ field reduction measures should not exceed approximately 4 percent of the total cost of the Project.
5. ~~Mitigation~~ Field reduction measures should have a noticeable reduction in the magnetic field level at the edge(s) of the right-of-way approximately 15 percent or more.

B-4 *The fifth EMF reduction item at the top of page 4 has been revised follows:*

5. ~~Mitigation~~ Field reduction measures should have a noticeable reduction in the magnetic field level at the edge(s) of the right-of-way approximately 15 percent or more.

CHAPTER 9

Agencies, Organizations, and Persons that Received the Final EIR

The Lead Agency (the California Public Utilities Commission), the project Applicant (Southern California Edison), and listed parties on the CPUC service list received a hard copy of the Final EIR. All other agencies, organizations, and individuals that submitted comments on the Draft EIR received a compact disc (CD) of the Final EIR unless a hard copy was specifically requested. Table 9-1 shows the commenters who received a hard copy of the Final EIR via an overnight delivery service, while Table 9-2 shows the commenters who received a hard copy of the Final EIR via the United States Postal Service (USPS). Table 9-3 shows the commenters who received a CD of the document.

**TABLE 9(RTC)-1
ORGANIZATIONS, AGENCIES AND INDIVIDUALS
SENT A HARD COPY OF THE FINAL EIR VIA OVERNIGHT DELIVERY SERVICE**

Organization/Affiliation	First Name	Last Name	Street	City	State	Zip Code
Lead Agency/Applicant						
California Public Utilities Commission	Jensen	Uchida	505 Van Ness Avenue, Energy Division, Room 4A	San Francisco	CA	94102
California Public Utilities Commission	Hallie	Yacknin	505 Van Ness Avenue, Energy Division, Room 4A	San Francisco	CA	94102
Southern California Edison Company	Susan	Nelson	2244 Walnut Grove Ave, Quad 3D, GO1	Rosemead	CA	91770
Parties on CPUC Service List						
California Farm Bureau Federation	Karen	Mills	2300 River Plaza Drive	Sacramento	CA	95833
City of Farmersville	Rene	Miller	909 West Visalia Road	Farmersville	CA	93223
City of Visalia	Jesus	Gamboa	425 E. Oak, Suite 301	Visalia	CA	93291
Ruddell Cochran Stanton Smith Bixler & Wisheart, LLC	D. Zachary	Smith	1102 N. Chinowth	Visalia	CA	93291
Southern California Edison Company	Jennifer	Hasbrouck	2244 Walnut Grove Avenue, PO Box 800	Rosemead	CA	91770
Tulare County Farm Bureau	Patricia I.	Stever	737 North Ben Maddox Way	Visalia	CA	93292-6622
Valley View Ranch/ Sierra View Ranch	Philip	Pescosolido	150 West Pine Street	Exeter	CA	93221
	Ken	Fitzgerald	3330 W. Mineral King Ave, Suite H	Visalia	CA	93291
	Mary A.	Gorden	PO Box 44066	Lemoncove	CA	93244
	Lon W.	House Ph.D.	4901 Flying C Rd.	Cameron Park	CA	95682
	John O. & Shirley B.	Kirkpatrick	23114 Carson Avenue	Exeter	CA	93221-9744
	Barbrae	Lundberg	23002 Close Ave	Exeter	CA	93221
	George	Mcewen	22114 Boston Ave.	Exeter	CA	93221
	Gayle	Mosby	3330 W. Mineral King Ave, Suite H	Visalia	CA	93291
	William F. and Peggy	Pensar	PO Box 44001	Lemon Cove	CA	93244-0001
	Eric	Quek	30905 Road 216	Exeter	CA	93221

**TABLE 9(RTC)-2
ORGANIZATIONS, AGENCIES AND INDIVIDUALS
SENT A HARD COPY OF THE FINAL EIR VIA USPS**

Organization/ Affiliation	Name of Commenter(s)	Street	City	State	Zip Code
CA Department of Fish and Game, Central Region	Jeffrey Single	1234 East Shaw Avenue	Fresno	CA	93710
City of Visalia	Mike Olmos	315 East Acequia Avenue	Visalia	CA	93291
City of Visalia	Alex Peltzer	100 Willow Plaza	Visalia	CA	93291
City of Woodlake	Raul Gonzales	350 North Valencia Boulevard	Woodlake	CA	93286-1244
Department of Conservation, Division of Land Resource Protection	Dan Otis	801 K Street, MS 18-01	Sacramento	CA	95814
Department of Transportation, District 6	Paul-Albert Marquez	1352 West Olive Avenue, PO Box 12616	Fresno	CA	93778
Exeter City Council	Jack Allwardt	PO Box 237	Exeter	CA	93221
Farmersville City Council	Paul Boyer	225 N. Brundage	Farmersville	CA	93225
Kaweah Lemon Company	David Cairns	PO Box 44259	Lemon Cove	CA	93244
Lemon Cove Ditch Company	David Cairns	PO Box 44259	Lemon Cove	CA	93244
San Joaquin Valley APCD	Dave Warner, Arnaud Marjollet	1990 E. Gettysburg Avenue	Fresno	CA	93726-0244
Stone Corral Irrigation District	William D. West	37656 Road 172	Visalia	CA	93292-919
Tulare County Board of Supervisors, District One	Allan Ishida	2800 W. Burrel Avenue	Visalia	CA	93291
Tulare County Board of Supervisors, District Four	Steve Worthley	Administration Building. 2800 West Burrel	Visalia	CA	93291
Wallace Ranch Water Company	David Cairns	PO Box 44259	Lemon Cove	CA	93244
Woodlake City Council	Jose Martinez	350 North Valencia Boulevard	Woodlake	CA	93286
	Arturo Ramirez	410 South 8th Street	Fowler	CA	93625
	Connie Sing	533 Santa Rosa	Visalia	CA	93292
	Doyle Ritchie	P.O. Box 7777	Visalia	CA	93290
	Melissa Deitz	20829 Avenue 380	Elderwood	CA	93286
	Rhonda Montgomery	4621 W Delta Ave	Visalia	CA	93291

**TABLE 9(RTC)-3
ORGANIZATIONS, AGENCIES AND INDIVIDUALS SENT A
COMPACT DISC (CD) COPY OF THE FINAL EIR VIA USPS**

Organization/Affiliation	Name of Commenter(s)	Street	City	State	Zip Code
AMEC	David Bean	1281 E. Alluvial Avenue, Suite 101	Fresno	CA	93720-2659
Baker Manock & Jensen (representing Paramount Citrus Association)	Christopher Campbell	5260 North Palm Avenue, Fourth Floor	Fresno	CA	93704
Belknap Pump Company	Scott Belknap	1577 N. Alta	Dinuba	CA	93618
California Citrus Mutual	Bob Blakely	512 N. Kaweah Avenue	Exeter	CA	
Christian Services Brigade	Foster Hengst	37650 Millwood Drive	Woodlake	CA	93286
CJ Hammers Pump Co.	Ken W. Womack	131171 Avenue 328, PO Box 311	Visalia	CA	93279
Donald Lawrence Construction Company	Donald L. Fulbright	PO Box 2622	Visalia	CA	93279
Farmland Conservation Strategies	Gregory S. Kirkpatrick	1428 W. Howard	Visalia	CA	93277
Foothill Bible Church	Suzanne Farag	531 S. Cornucopia Road	Exeter	CA	93221
Foothill Bible Church	William Fox	37955 Road 200	Elderwood	CA	93286
Kaweah Pump Inc.	Bill Gargan	15499 Avenue 280	Visalia	CA	93292
Kenneth D. Schmidt and Associates (Groundwater Quality Consultant for PACE)	Kenneth Schmidt	600 West Shaw Suite 250	Fresno	CA	93704
LRP Orange Co.	Larry Peltzer	P.O. Box 48	Ivanhoe	CA	93235
McKellar Ranch Co., Inc.	Robert McKellar	P.O. Box 189 - 32988 Rd. 164	Ivanhoe	CA	93235-0189
Meling Bros	Conley Meling	17456 Avenue 344	Visalia	CA	93292
Meling Bros	Eric Meling	17456 Avenue 344	Visalia	CA	93292
Meling Bros	John Meling	17456 Avenue 344	Visalia	CA	93292
Merryman Ranch Company	Winthrop Pescosolido	29555 Road 210	Exeter	CA	93221
Pacific Crest Equine	Kelly Anez	2500 East Myer Avenue	Exeter	CA	93221
Paramount Citrus	Doug Carman	36445 Road 172	Visalia	CA	93292
Peltzer Family Farm Mgmt.	Sarah Peltzer	16865 Avenue 315	Visalia	CA	93292
Peltzer Groves, Inc.	Barbara Peltzer	34286 Road 188	Woodlake	CA	93286
Rocky Hill Incorporated		20700 Avenue 314, PO Box 175	Exeter	CA	93221
Schute, Mihaly & Weinberger, LLP	Fran M. Layton, Erin Chalmers, Laurel L. Impett	396 Hayes Street	San Francisco	CA	94102
Sentinel Butte Mutual Water Company	Doug Phillips	PO Box 606	Woodlake	CA	93286
The Wuksachi Local Native American Tribe	Johnny Sartuche	929 N. Lovers Lane	Visalia	CA	93292
UC Co-op Extension	Jim Sullins	UCCE Tulare County, 4437-B S. Laspina Street	Tulare	CA	93274

TABLE 9(RTC)-3 (Continued)
ORGANIZATIONS, AGENCIES AND INDIVIDUALS SENT A
COMPACT DISC (CD) COPY OF THE FINAL EIR VIA USPS

Organization/Affiliation	Name of Commenter(s)	Street	City	State	Zip Code
Wildlands, Inc.	Brian Monaghan	3855 Atherton Road	Rocklin	CA	95765
	Alan Hiatt	19898 Avenue 376	Woodlake	CA	93286
	Amy Alley	20600 Sentinel Drive	Woodlake	CA	93286
	B. Davis	37930 Road 200	Elderwood	CA	93286
	Barbara Ainley	3800 Road 197	Elderwood	CA	93286
	Barbara VanWellen	37149 Road 192	Woodlake	CA	93286
	Bill Ferry	37445-b Millwood Drive	Woodlake	CA	93286
	Bob Hengst	37900 Millwood Drive	Woodlake	CA	93286
	Bowe and Brenda McMahon	798 N. Pepper	Woodlake	CA	93286
	Cheryl Turner	2520 N Filbert Road	Exeter	CA	93221-9781
	Chris Corbett	1500 West Beverly Drive	Visalia	CA	93292
	Cliff Ronk	39034 Millwood Drive	Woodlake	CA	93286
	Corky and Laura Wynn	1524 W. Mariposa Street	Lindsay	CA	93247
	Courtney Hengst	37650 Millwood Drive	Woodlake	CA	93286
	Dale Kersten	2131 N. Clark Ct.	Visalia	CA	93292
	Darwin Hacobian	19839 Avenue 364	Woodlake	CA	93286
	David Hengst	37650 Millwood Drive	Woodlake	CA	93286
	Del Strange	464 E. Jackson Avenue	Tulare	CA	93274
	Delia Garza	1611 N Locust St	Visalia	CA	93291-3047
	Diane Heaton	3014 N. Filbert	Exeter	CA	93221
	Diane King	4025 W Noble Ave Suite A	Visalia	CA	93277-1631
	Douglas and Kaye Rydberg	39500 C Millwood Drive	Woodlake	CA	93286
	Dr. and Mrs. David Bockman	15870 Avenue 309	Visalia	CA	93292
	Elaine Breitbart	36940-B Millwood Dr.	Woodlake	CA	93286
	Evelyn Hodel	38131 Millwood Drive	Elderwood	CA	93286
	Gary and Colene Tarbell	37050 Road 192	Elderwood	CA	93286
	Gary and Rebecca Davis	37930 Road 200	Elderwood	CA	93286
	George McEwen	22114 Boston Avenue	Exeter	CA	93221
	George Walton	P.O. Box 373	Exeter	CA	93221
	Gus Marroquin	42016 Road 128	Orosi	CA	93647
	Hayley Hengst	37650 Millwood Drive	Woodlake	CA	93286
	Hudson Rose	18001 Ave 376	Visalia	CA	93292

TABLE 9(RTC)-3 (Continued)
ORGANIZATIONS, AGENCIES AND INDIVIDUALS SENT A
COMPACT DISC (CD) COPY OF THE FINAL EIR VIA USPS

Organization/Affiliation	Name of Commenter(s)	Street	City	State	Zip Code
	Jack and Kathy Pendley	P.O. Box 44079	Lemon Cove	CA	93244
	Jacob Deitz	20829 Avenue 380	Elderwood	CA	93286
	James Canterbury	1310 S. Atwood Ct.	Visalia	CA	93277-3499
	James Gorden	P.O. Box 44066	Lemon Cove	CA	93244
	James Hitchcock	1811 E. Seeger Ct	Visalia	CA	93292
	James Jordan	33880 Road 164	Visalia	CA	93292
	Jay and Nancy Culter	125 Carmel Street	San Francisco	CA	94117
	Jenna Mattison	26405 Mulanax Drive	Visalia	CA	93277-9509
	Joe Ferrara	3305 N. Gill Road	Exeter	CA	93221
	Joe Sing	533 W. Santa Rosa	Visalia	CA	93292
	Joel Heaton	3014 N. Filbert	Exeter	CA	93221
	John Pehrson	1571 N. Filbert Road	Exeter	CA	93221
	Jose Luis and Rose Ann Gutierrez	36601 A Millwood Drive	Woodlake	CA	93286
	Joseph Ferrara	3305 N. Gill Road	Exeter	CA	93221
	Joyce Frazier	P.O. Box 713	Woodlake	CA	93286
	Karen Redfield	21451 Avenue 360	Woodlake	CA	93286
	Kent and Gail Kaulfuss	P.O. Box 44047 - 32265 Road 244	Lemon Cove	CA	93244
	Larry Ronk	410 N Camelia Avenue	Farmersville	CA	93223
	LaVerne Hodel	38131 Millwood Drive	Elderwood	CA	93286
	Lenora Graves	20506 Avenue 380	Woodlake	CA	93286
	Leroy and Sandy Maloy	21638 Avenue 360	Woodlake	CA	93286
	Linda Hengst	37900 Millwood Drive	Woodlake	CA	93286
	Lindsay Turner	1688 Tonini Drive #36	San Luis Obispo	CA	93401
	Lorene Clark	17770 Ave 288	Exeter	CA	93221
	Lubbert Van Dellen	36705 Road 194	Woodlake	CA	93286
	Lynette Ramirez	28687 Road 148	Visalia	CA	93292
	Mary Gordon	P.O. Box 44066	Lemon Cove	CA	93244
	McKenzie Family (Karen McKenzie, MD)	316 W. Acequia Avenue	Visalia	CA	93291-6232
	Mike and Sharon Potts	36680 Millwood Drive	Woodlake	CA	93286
	Nancy Hamlin	36258 Road 196	Woodlake	CA	93286
	Nancy Van Dellen	36705 Road 194	Woodlake	CA	93286

TABLE 9(RTC)-3 (Continued)
ORGANIZATIONS, AGENCIES AND INDIVIDUALS SENT A
COMPACT DISC (CD) COPY OF THE FINAL EIR VIA USPS

Organization/Affiliation	Name of Commenter(s)	Street	City	State	Zip Code
	Patricia Whitendale and family	29349 Road 152	Visalia	CA	93292
	Patty Colson	P.O. Box 237	Tulare	CA	93275
	Ralph Alley	20600 Sentinel Drive	Woodlake	CA	93286
	Randy Redfield	21451 Avenue 360	Woodlake	CA	93286
	Richard and Bernice Marshall	1622 E. Sunnyside Avenue	Visalia	CA	93292
	Robert and Mary Edmiston	36699 Millwood Drive	Woodlake	CA	93286
	Robert Bennett Lea III	37327 Millwood Drive	Woodlake	CA	93286
	Robert Edmiston	36699 Millwood Drive	Woodlake	CA	93286
	Robert Ward	20569 Avenue 300	Exeter	CA	93221
	Rudy Garcia	154 S. Pepper	Woodlake	CA	93286
	Stacy Kelch	17394 Avenue 288	Exeter	CA	93221
	Suzanne Bidwell	P.O. Box 427	Woodlake	CA	93292
	Tami Tarbell-Lea	37327 Millwood Drive	Woodlake	CA	93286
	Tammi Hitchcock	1811 E. Seeger Ct	Visalia	CA	93292
	Terrance Peltzer	33527 Road 152	Ivanhoe	CA	93235-1040
	Terri Hacobian	19839 Avenue 364	Woodlake	CA	93286
	The DeLeonardis Family (Don DeLeonardis)	34295 Road 152	Visalia	CA	93292-9562
	Tom and Jennifer Logan	P.O. Box 44140	Lemon Cove	CA	93244
	Tony Calcagno	237 High Sierra Drive	Exeter	CA	93221
	Trish Whitendale	29349 Road 152	Visalia	CA	93292
	Trudy Wischemann	P.O. Box 1374	Lindsay	CA	93247
	Wayne Van Dellen	37149 Road 192	Woodlake	CA	93286
	William Maurer	325 E. Marinette Ave	Exeter	CA	93221-9782



[CPUC Home](#)

10. Overriding Considerations

Pursuant to CEQA Guidelines § 15093, the Commission may only approve a project that results in significant and unavoidable impacts upon a finding that there are overriding considerations. As discussed previously, this project is needed in order to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor. On June 24, 2004, the California Independent System Operator Board of Governors approved the looping of the Big Creek 3-Springville 220 kV transmission line into the Rector Substation as the preferred long-term transmission alternative to address identified reliability concerns. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 MW, and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need for rolling outages and/or customer blackouts in the area served by Rector Substation. For these reasons, we find that there are overriding considerations that support our adoption of the environmentally superior project Alternative 2, despite its significant unavoidable impacts on agricultural and cultural resources.

[Previous Page](#) [Top of Page](#) [Next Page](#) [First Page](#)

Decision 10-07-043 July 29, 2010

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U-338-E) for a Certificate of Public Convenience and Necessity for the San Joaquin Cross Valley Loop Transmission Project.

Application 08-05-039
(filed May 30, 2008)

**DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY
A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP
TRANSMISSION PROJECT**

TABLE OF CONTENTS

Title	Page
DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY	2
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT	2
1. Summary	2
2. Procedural Background	2
2.1. Application and Protests	2
2.2. Public Participation	3
2.3. Environmental review	5
2.4. Evidentiary Hearings and Briefing	5
3. Scope of Issues.....	6
4. Public Convenience and Necessity	8
5. Description of Project Alternatives	9
6. Significant Environmental Impacts and Mitigation	11
6.1. Summary	11
6.2. Agricultural Resources	11
6.3. Cultural Resources	13
6.4. Biological Resources.....	14
6.5. Unique Adverse Impacts (Alternative 3A)	15
7. Environmental Superior Alternative	15
8. Certification of EIR	16
8.1. Evaluation of Alternative 3A	17
8.2. Analysis of Environmental Impacts	20
8.2.1. Paramount Citrus	20
8.2.2. Visalia	23
8.2.3. Farmersville	25
8.3. Sufficiency of Mitigation Measures	26
8.3.1. Paramount Citrus	26
8.3.2. Farm Bureau	26
8.3.3. Visalia	30
8.4. Identification of Environmentally Superior Alternative	31
9. Infeasibility of Environmentally Superior Alternative	32
9.1. Route Selection.....	32
9.1.1. SCE.....	32
9.1.2. Farm Bureau	35

Title	Page
9.2. Additional Mitigation	36
10. Overriding Considerations	37
11. EMF.....	38
12. Project Cost.....	39
13. Comments on Proposed Decision.....	41
14. Assignment of Proceeding	42
ORDER	44
ATTACHMENT 1 - Mitigating Monitoring, Reporting and Compliance Program	
ATTACHMENT 2 - SJXVL Mailing List	

**DECISION GRANTING SOUTHERN CALIFORNIA EDISON COMPANY A
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
TO CONSTRUCT THE SAN JOAQUIN CROSS VALLEY LOOP
TRANSMISSION PROJECT**

1. Summary

This decision grants Southern California Edison Company a certificate of public convenience and necessity to construct the San Joaquin Cross Valley Loop Transmission Project, using the environmentally superior project Alternative 2 identified in the Environmental Impact Report. As the lead agency for environmental review of the project, we find that the Environmental Impact Report prepared for this project meets the requirements of the California Environmental Quality Act, and that there are overriding considerations that merit construction of the project notwithstanding its significant and unavoidable environmental impacts. We adopt a maximum project cost of \$122.182 million, excluding allowances for funds used during construction. This proceeding is closed.

2. Procedural Background

2.1. Application and Protests

Southern California Edison Company (SCE) filed this application on May 30, 2008. As proposed by SCE, the San Joaquin Cross Valley Loop would consist of the construction of a new 19 mile double-circuit 220 kilovolt (kV) transmission line, beginning at Rector Substation located southeast of Visalia, and running east until the line intersects with the Big Creek 3-Springville 220 kV transmission line located east of Lemon Cove and Highway 198 (Alternative 1). SCE also identified several project alternatives including Alternative 2, under which the transmission line would turn east starting approximately 10 miles

north of Alternative 1's easterly turn, and Alternative 3, which would turn east starting approximately 13.5 miles north of Alternative 1's easterly turn.

Protests were filed by the City of Visalia (Visalia); the City of Farmersville (Farmersville); the Kaweah Delta Water Conservation District; the Tulare County Farm Bureau; Protect Agriculture Communities Environment (PACE); Merryman Ranch Corporation, Sierra View Ranch and Valley View Ranch (jointly); Barbrae Lundberg; Kenneth Fitzgerald and Susan Fitzgerald (jointly); Gayle Mosby; Eric Quek; John O. Kirkpatrick and Shirley B. Kirkpatrick (jointly, Kirkpatricks); William F. Pensar; Mary Amanda Gorden; and George A. McEwen.

The California Farm Bureau Federation's unopposed motion for party status was granted by oral ruling at the prehearing conference on November 19, 2008.

The Paramount Citrus Association's (Paramount Citrus) unopposed motion for party status, filed August 31, 2009, was granted by ruling dated September 15, 2009.

2.2. Public Participation

The Commission received over 1,200 letters from the public objecting to the proposed project. Most of the letters expressed opposition to Alternative 1 on the basis of its impacts on agricultural resources, aesthetic resources, property values and economic development in the City of Farmersville, and preference for Alternative 3 on the basis that it would impact the fewest residents.

Approximately 300 people attended the public participation hearing held in Visalia on November 19, 2008. Fifty-nine people spoke regarding the proposed project's impacts on agricultural resources, aesthetic resources, economic development, property values and impact on the community.

Approximately 25 speakers objected to the proposed project's aesthetic impacts by interfering with views of the Sierra Nevada and creating blight. Most of them raised concerns specific to Alternative 1 for its adverse aesthetic impacts in and about the towns of Exeter and Lemon Cove, along State Route 198, and on the private residential development of Badger Hill, and its potential interference with the future development of a retail site in Farmersville, which has the potential to bring economic opportunities to the community.

Nearly 20 speakers addressed agricultural concerns. They noted Tulare County's agricultural tradition and range of crops that contribute to making it the second-leading agricultural producing area in California. The speakers urged the Commission to consider the project's impacts on the area's agricultural tradition, productivity and employment. The proposed project will require not only the removal of trees in walnut and citrus orchards, but also the relocation of wells and rerouting and rebuilding of irrigation systems. These impacts would extend up to 100 feet beyond both sides of the right of way due to the inability to operate the necessary construction and maintenance machinery close to the transmission lines. Seven speakers stated their preference for Alternative 3 on the basis that it would impact the fewest people, cross less valuable land, and be the shortest route, while two speakers raised concerns that Alternative 3 would adversely impact their own farming operations.

Several other speakers raised various other concerns including the proposed project's impacts on air quality, cultural resources including Native American paintings and spiritual sites, biological resources including shrimp and migrating birds, and public safety resulting from electromagnetic fields. One speaker urged the Commission to consider the potential for alternative tower configurations to reduce adverse impacts, and another speaker

urged the Commission to consider the potential for solar development to replace the need for this project.

2.3. Environmental review

On August 22, 2008, the Commission's Energy Division staff issued a Notice of Preparation (NOP) of an environmental impact report (EIR) for the proposed project. The NOP described the proposed project, solicited written and oral comments on the EIR's scope, and gave notice of the public scoping meetings to be held on September 17, 2008, in Farmersville, California, and on September 18, 2008, in Woodlake, California. Energy Division received 44 oral comments at the public scoping meetings and 96 letters or electronic mails during the 30-day comment period. Energy Division issued the draft EIR on June 16, 2009,¹ and conducted a public comment meeting on July 23, 2009, in Visalia, California, which was attended by approximately 500 people. Energy Division received oral comments from 37 people at the public comment meeting, and written comments from 129 persons and/or organizations during the 45-day comment period. Energy Division responded to all comments in the final EIR, which it issued on February 23, 2010.

2.4. Evidentiary Hearings and Briefing

On June 23, 2009, the assigned Commissioner issued a scoping memo and ruling which noted issuance of the draft EIR on June 16, 2009, identified the issues to be determined by the Commission in resolving the proceeding (see Section 3, below), and set a schedule for addressing those issues. In particular, the scoping memo determined that the proposed project's significant

¹ The draft EIR was received into evidence at the evidentiary hearing on August 31, 2009.

environmental impacts, mitigation measures to eliminate or lessen those impacts, and identification of the environmentally superior alternative are within the scope of the CEQA review, and that factual evidence regarding those issues would be admitted into the evidentiary record through the EIR; evidence regarding all other issues would be taken through evidentiary hearing.

Evidentiary hearing was conducted on August 31, 2009.² The final EIR was received into the evidentiary record by Administrative Law Judge (ALJ) ruling on February 25, 2010.

SCE, the City of Visalia, the City of Farmersville, California Farm Bureau Federation and Tulare County Farm Bureau (jointly, Farm Bureau), and PACE filed opening briefs on all issues on March 11, 2010; Paramount Citrus filed its opening brief on March 12, 2010.³ The record was submitted upon the filing of reply briefs on March 25, 2010, by SCE, Farm Bureau, PACE, Farmersville, and the Kirkpatricks.

3. Scope of Issues

Pursuant to Pub. Util. Code § 1001 et seq., SCE may not construct its proposed project absent certification by the Commission that the present or future public convenience and necessity require it. In determining whether to certify construction of the project, the Commission must consider community values, recreational and park areas, historical and aesthetic values, and the influence on the environment. (Pub. Util. Code § 1002(a).) The review process

² The unopposed October 2, 2009, motion of SCE to correct the transcript of the August 31, 2009, evidentiary hearing is hereby granted.

³ The unopposed March 31, 2010, motion of Paramount Citrus to accept its late-filed opening brief is hereby granted.

established by the California Environmental Quality Act (CEQA) is the primary vehicle for this consideration. CEQA requires the lead agency (the Commission in this case) to conduct a review to identify environmental impacts of the project and ways to avoid or reduce environmental damage. CEQA precludes the lead agency from approving a proposed project unless it requires the project proponent to eliminate or substantially lessen all significant effects on the environment where feasible, and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations. CEQA requires that, prior to approving the project or a project alternative, the lead agency certify that the environmental review was conducted in compliance with CEQA, that it reviewed and considered the EIR prior to approving the project or a project alternative, and that the EIR reflects its independent judgment. (Pub. Res. Code § 21082.1(c)(3), CEQA Guidelines § 15090.)

In addition, pursuant to General Order 131-D and Decision (D.) 06-01-042, the Commission will not certify a project unless its design is in compliance with the Commission's policies governing the mitigation of electromagnetic field (EMF) effects using low-cost and no-cost measures.

Accordingly, the June 23, 2009, Scoping Memo and Ruling determined the following issues to be within the scope of the proceeding:

1. Does the proposed project serve a present or future public convenience and necessity? (Pub. Util. Code § 1001.)
2. What are the significant environmental impacts of the proposed project?
3. Are there potentially feasible mitigation measures that will eliminate or lessen the significant environmental impacts?
4. As between the proposed project and the project alternatives, which is environmentally superior?

5. Was the EIR completed in compliance with CEQA, did the Commission review and consider the EIR prior to approving the project or a project alternative, and does the EIR reflect the Commission's independent judgment? (CEQA Guideline § 15090.)⁴
6. Are the mitigation measures or project alternatives infeasible? (CEQA Guideline 15091(a)(3).) This issue includes consideration of community values pursuant to Pub. Util. Code § 1002(a)(1).
7. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative? (CEQA Guideline § 15093.)
8. Is the proposed project and/or project alternative designed in compliance with the Commission's policies governing the mitigation of EMF.
9. If a certificate is granted, what is the maximum cost of the approved project? (Pub. Util. Code § 1005.5(a).)

4. Public Convenience and Necessity

SCE states that the project is needed in order to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor. SCE notes that, on June 24, 2004, the California Independent System Operator Board of Governors approved the looping of the Big Creek 3-Springville 220 kV transmission line into the Rector Substation as the preferred long-term transmission alternative to address identified reliability concerns. No party disputes the need for the project. We find it necessary to loop the Big Creek

⁴ This issue was listed as no. 7, and other issues numbered accordingly, in the scoping memo.

3-Springville 220 kV transmission into the Rector Substation to address reliability concerns.

5. Description of Project Alternatives

The EIR evaluated SCE's preferred Alternative 1, a "no project" alternative, and three alternative transmission route alignments (Alternatives 2, 3 and 6) that were identified through the scoping process and meet the project purpose. In addition, in response to comments on the draft EIR, the final EIR environmentally screened a variation to Alternative 3, dubbed "Alternative 3A."

Alternative 1 would proceed from the Rector Substation to 1.1 miles north within the existing SCE right of way, and then traverse east from the City of Visalia north of the cities of Farmersville and Exeter to the Big Creek 4-Springville existing transmission line located at the western foothills of the Sierra Nevada Mountains, generally crossing agricultural lands and scattered rural residences. The total length of the Alternative 1 is approximately 19 miles.

Alternative 2 would proceed from the Rector Substation north in the existing right of way to mile 10.8, 9.7 miles past the point where Alternative 1 turns east. At mile 10.8, the alignment turns east for 3.5 miles, and then turns north to parallel Road 176 until Avenue 376. The alignment then proceeds east, paralleling Avenue 376 and then southeast through a saddle along the base of Colvin Mountain until Road 1945. From mile 17.3 to mile 17.9, the alignment extends south and then southeast until Road 196. From there, the alignment extends east for approximately 1.2 miles and the south for approximately 0.6 miles. At mile 19.7, the alignment turns east along the base of Lone Oak Mountain and continues east until it reaches the existing Big Creek 3-Springville transmission line. The total length of Alternative 2 is approximately 23 miles.

Alternative 3 would proceed from the Rector Substation north in the existing right of way to mile 14.6, 13.5 miles past the point where Alternative 1 turns east. At mile 14.6 (approximately 400 feet south of the Friant-Kern Canal), the alignment turns east and crosses Stokes Mountain for approximately 3 miles. The alignment then descends from the Stokes Mountain ridgeline for approximately 1 mile and turns northeast to parallel the Stokes Mountain/Stone Corral Canyon interface for approximately 4 miles. The alignment then crosses Boyd Drive and continues in the same northeasterly direction to crest the Goldstein Peak ridgeline at mile 23. The alignment then descends into the Rattlesnake Creek Valley until it reaches the existing Big Creek 3-Springville transmission line. The total length of Alternative 3 is approximately 24.3 miles.

Alternative 3A would incorporate a variation to Alternative 3 that would avoid the Stone Corral Ecological Reserve and its sensitive biological resources.

Alternative 6 would proceed from the Rector Substation north in the existing right of way to mile 8.1, 7 miles past the point where Alternative 1 turns east. At mile 8.1, the alignment turns east for approximately 6.9 miles. At mile 15, the alignment turns north for 2 miles. At mile 17, the alignment would head east and then northeast for approximately 0.3 miles where it would begin to follow the same alignment as Alternative 2 until it reached the existing Big Creek 3-Springville transmission line. The total length of Alternative 6 is approximately 20.5 miles.

Under the “no project” alternative, the proposed project would not be implemented and the reliability issues would continue.

6. Significant Environmental Impacts and Mitigation

6.1. Summary

Under all of the alternatives, the proposed project would have significant and unavoidable adverse impacts on agricultural resources and on cultural resources. In addition, Alternative 3 would have unavoidable significant adverse impacts on biological resources, and Alternative 3A would have additional adverse impacts on aesthetics and land use, planning and policies as compared to Alternative 2.

Under the “no project” alternative, the proposed project would not be implemented and, therefore, no adverse environmental impacts would occur.

6.2. Agricultural Resources

Construction of Alternative 1’s new permanent access roads and placement of 114 new poles and lattice towers would permanently disturb approximately 31.9 acres of farmland, including 16.8 acres of “prime farmland,” 0.7 acres of “unique farmland, and 14.4 acres of ‘farmland of statewide importance’” as defined by the Department of Conservation Farmland Mapping and Monitoring Program. A variety of crops are currently grown within these 31.1 acres, the most common of which are oranges (13.8 acres) and walnuts (5.0 acres), which would be permanently disturbed by this construction.

Although agricultural uses, including hundreds of dairies and thousands of acres of citrus and walnut groves, still dominate Tulare County’s landscape, the County has seen a reduction in agricultural land to due urbanization, with a reduction of 12,355 acres of farmland between 2004 and 2006. The acreage of farmland in Tulare County is generally expected to continue to decline, and Alternative 1 would contribute incrementally to it.

As mitigation defined in the EIR, SCE would be required to obtain an acre of agricultural conservation easement⁵ for every acre of prime farmland, unique farmland, and farmland of statewide importance⁶ that is permanently converted. While this mitigation would reduce the impact of the conversion of farmland to non-agricultural uses, Alternative 1 would nonetheless result in the permanent conversion of farmland and contribute to the decline in farmland acreage in Tulare County. This impact to farmland would be significant and unavoidable.

As with Alternative 1, construction of roads and new pole sites for Alternatives 2, 3, 3A and 6 would permanently remove farmland to non-agricultural use. This impact to agricultural resources would be significant and unavoidable. The following table sets forth the amount of farmland acreage that would be permanently removed from agricultural use, by alternative:

Alternative	1	2	3	3A	6
Farmland acreage	31.9	25.6	18.2	21.8	31.6

The draft EIR preliminarily determined that, under all alternatives, the proposed project would require the removal of walnut trees from the new portions of the rights of way, which would cause a further significant and unavoidable impact to agricultural resources. Specifically, under General Order 95, shrubs and trees located within a right of way under transmission lines must be maintained to not exceed a 15-foot height. The draft EIR determined that, while orange and other citrus trees can remain productive

⁵ An agricultural conservation easement is a voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture.

when cropped to this height, walnut trees cannot. Consequently, the draft EIR determined that the proposed project would effectively convert walnut acreage located in the new rights of way to non-agricultural use. However, upon further analysis in response to comments, the final EIR determined that this significant impact can be avoided by increasing the height of the transmission line to allow for a maximum walnut height of 30 feet. (Final EIR, at G-17 – G-18.)

6.3. Cultural Resources

The Big Creek 1–Rector and Big Creek 3–Rector 220 kV transmission line and the Rector Substation are part of the Big Creek Hydroelectric System Historic District (Historic District). The generation and transmission facilities of the Big Creek system date between 1911 and 1929, and are eligible for listing in the National Register of Historic Places and the California Register of Historic Resources. The Rector Substation was constructed at the same time, and is eligible for listing in the California Register of Historic Places.

Alternative 1 would require demolishing and removing approximately 26 original single-circuit lattice towers within the transmission line right of way. In addition, this alternative would require demolishing and removing original 220 kV transmission line towers from the Rector switchyard, installing a tubular steel pole and adding a pre-fabricated metal mechanical and electrical equipment room adjacent to the substation building. These activities would adversely impact the facilities’ physical characteristics that qualify them for inclusion in the California Register of Historic Resources. Although SCE would document the adversely affected components of the Historic District prior to their removal,

⁶ All subsequent references to “farmland” refer specifically to combined prime farmland, unique farmland and farmland of statewide importance.

which would lessen the impacts, the impacts would remain significant and unavoidable.

Approximately 10.8 miles of Alternative 2, 14.6 miles of Alternatives 3 and 3A, and 8.1 miles of Alternative 6 would be located within the Big Creek 1-Rector 220 kV transmission line right of way. All four alternatives would have similar significant and unavoidable impacts to this component of the Historic District as Alternative 1.

When considered in combination with other future projects, the proposed project's incremental contribution to impacts to the Historic District would be significant and unavoidable.

6.4. Biological Resources

Alternatives 1, 2, 3A and 6 would have less than significant environmental impacts, or have significant environmental impacts that would be reduced to less than significant levels with the incorporation of mitigation measures, in the area of biological resources.

Under Alternative 3, the subtransmission line would traverse a portion of the Stone Corral Ecological Reserve that supports more than three acres of vernal pool habitat where the existing Big Creek - Rector lines traverse the reserve. The removal of existing facilities, installation of new lines and the creation of access roads would directly impact more than three acres of northern claypan vernal pool habitat that is within designated critical habitat known to support special status plant and wildlife species. Project activities could permanently alter local hydrology in adjacent vernal pools with compounding indirect project effects on wetlands and water flow in surrounding portions of the reserve. While impacts would be reduced with mitigation, they would

remain significant and unavoidable following mitigation based on the extreme sensitivity of the Stone Creek Ecological Reserve to disturbance.

6.5. Unique Adverse Impacts (Alternative 3A)

The final EIR identified the following unique adverse impacts of Alternative 3A that have the potential to be significant: Alternative 3A would place the transmission line right of way within 50 feet of four private residences and surround a business on three sides, it would bisect several agricultural parcels contrary to sound land use planning practices, and it would encroach on a proposed development shown in Tulare County's draft General Plan.

Given its unique adverse impacts and modest reduction in impacts to farmland (Alternative 3A would remove 21 acres of farmland, which is only four acres less than the environmentally superior Alternative 2 (see Section 7, below)), the final EIR determined that Alternative 3A was not likely to provide a superior benefit over Alternative 2.

7. Environmental Superior Alternative

The EIR identifies Alternative 2 as the environmentally superior alternative.

While implementation of all of the proposed project alternatives would result in significant unavoidable impacts on cultural resources, the degree of variation between their impacts is not material enough to determine a preferred alternative on the basis of impacts on cultural resources.

With regard to agricultural resources, Alternative 3 would have the least impact among the project alternatives, removing 18.2 acres of farmland. However, Alternative 3 would not be environmentally superior due to its significant unavoidable impacts on biological resources.

Alternative 3A would have the next least impact on agricultural resources, removing 21.8 acres of farmland. However, Alternative 3A would not be environmentally superior due to its potentially significant adverse impacts related to its proximity to several residences and surrounding of a business, its bisection of agricultural parcels, and encroachment on a proposed development.

Alternative 2 would have the next least impact on agricultural resources, removing 25.6 acres of farmland. Alternative 6 would have a greater impact on agricultural resources than Alternative 2, removing 31.6 acres of farmland, and Alternative 1 would have the greatest impact on agricultural resources among the alternatives, removing 31.8 acres of farmland.

Alternative 2 is the environmentally superior alternative because it would result in only slightly greater impacts to farmland than Alternatives 3 and 3A but would not result in the significant or potentially significant impacts unique to Alternatives 3 and 3A.

8. Certification of EIR

CEQA requires the lead agency to certify that the EIR was completed in compliance with CEQA, that the agency has reviewed and considered it prior to approving the project, and that the EIR reflects the agency's independent judgment. As previously discussed, the EIR was completed after notice and opportunity for public comment on the scope of the environmental review and the draft EIR, as required by CEQA. The final EIR compiles and reflects all written and oral comments made on the draft EIR, and responds to them, as required by CEQA. The EIR identifies the proposed project's significant and unavoidable environmental impacts, mitigation measures that will avoid or substantially lessen them, and identifies Alternative 2 as the environmentally superior alternative. We have reviewed and considered the information

contained in the EIR, as well as parties' challenges to the adequacy of the EIR as discussed below. We certify that the EIR was completed in compliance with CEQA, that we have reviewed and considered the information contained in it, and that it reflects our independent judgment.

With respect to the parties' challenges to the EIR, we reiterate CEQA Guideline § 15151 which states in part, "Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." As discussed more fully below, the EIR fully reflects the parties' disagreements and responds to them appropriately, and thus is in compliance with CEQA.

8.1. Evaluation of Alternative 3A

PACE and the Kirkpatricks assert that the EIR inappropriately failed to evaluate Alternative 3A on the basis of its erroneous conclusion that the use of an abandoned railroad right of way for 4100 feet of the route is legally infeasible. Specifically, based on communications with the railroad's Western Region Property Manager, the final EIR determined that the right of way is owned by Rail America, who does not wish to sell it. PACE alleges that, according to its own investigation after the final EIR issued, the right of way is owned by Tulare Valley Railroad, which is quite willing to sell it. Putting aside this apparent factual discrepancy regarding ownership of the railroad right of way, the assertion that the EIR did not evaluate Alternative 3A is incorrect. To the contrary, the EIR reconfigured Alternative 3A to parallel the railroad right of way at issue, and evaluated the alternative under this reconfiguration to determine its impacts. The suggestion that the EIR misidentified Alternative 3A's unique adverse impacts as a result of misidentifying the railroad right of way's owners is likewise incorrect: The unique adverse impacts

identified in the EIR occur outside of the railroad right of way and therefore apply equally to both configurations.

Farm Bureau and Paramount Citrus assert that the EIR's reconfiguration of Alternative 3A unnecessarily increased impacts to agricultural resources. This assertion appears to incorrectly assume that the portion of Alternative 3A that would otherwise follow the railroad right of way would not cause agricultural impacts. To the contrary, regardless of whether it follows the railroad right of way or the land adjacent to it, that portion of the route would traverse lands that are almost entirely designated as prime farmland, unique farmland, or farmland of statewide importance.⁷ Thus, it is reasonable to assume that the difference between the configurations' agricultural impacts would be slight.

Farm Bureau, Paramount Citrus, Farmersville and the Kirkpatricks take issue with the EIR's determination that Alternative 3A's adverse environmental impacts are unique and that it is therefore unlikely to be superior to Alternative 2. Farm Bureau, Paramount Citrus and Farmersville contend that Alternative 3A's adverse impacts are not unique, but similar to other alternatives' impacts that the EIR found to be insignificant. To the contrary, the EIR adequately distinguishes Alternative 3A's adverse impacts from the similar impacts of other alternatives: Alternative 3A would place the transmission line in close proximity of four private residences and surround a business on three sides; Alternative 3A's right of way would pass within 50 feet of four residences while, at approximately 300 feet away, Alternative 2's right of

⁷ As shown by comparing the maps, or "road story," of Alternative 3 (Draft EIR, Appendix C, at 20 of 34) to the map of important farmlands (Draft EIR, Figure 4.2-1.)

way would be much farther removed from its three impacted residences. Alternative 3A would surround an existing business operation on three sides by transmission lines and structures, while Alternative 2 would have no similar adverse impact. Alternative 3A would diagonally bisect several agricultural parcels; while, as Paramount Citrus notes, Alternative 2 would also bisect several agricultural parcels, it would do so in parallel to parcel boundaries and, in many instances, following existing farm roads.⁸ Alternative 3A would encroach on eight parcels in a proposed development shown in Tulare County's draft General Plan; Alternative 1 would bisect a single (albeit the preferred) parcel for future development of a retail site. Given these distinctions, the Commission cannot reasonably assume that Alternative 3A's impacts are insignificant by comparison to Alternative 1.

The Kirkpatricks claim that the EIR's analysis of Alternative 3A demonstrates a biased, deliberate effort by its preparers to avoid meaningful participation and input by the public. As evidence of this claim of professional misconduct, the Kirkpatricks assert that there was practically no contact initiated by the EIR team to follow up with the public on their comments; that the EIR fails to demonstrate that SCE is legally prevented from using its alleged easement over the Stone Corral Ecological Reserve; that the EIR's analysis of Alternative 3A (as discussed previously) demonstrates lack of a reasonable and good faith undertaking; and that the EIR erroneously concludes that Alternative 3A would adversely impact, rather than enhance, the poultry business which it would surround on three sides. The Kirkpatricks do not

⁸ See Draft EIR, Appendix C, Section 1, at 17-24 of 27.

identify how, if at all, the EIR team's follow-up on public comments failed to comply with the requirements of CEQA. The Kirkpatricks do not identify how, if at all, SCE's alleged easement over the Stone Corral Ecological Reserve alters the proposed project's environmental impacts. As discussed previously, the EIR reasonably analyzed Alternative 3A. The Kirkpatricks' contrary opinion that surrounding the implicated business on three sides with transmission lines and structures is a positive, rather than negative, impact does not make the EIR inadequate (CEQA Guideline § 15151), much less demonstrate bias or misconduct. The Kirkpatricks' claims of bias and professional misconduct by the Commission's EIR team are entirely without merit.

Alternative 3A would not avoid or substantially lessen the project's significant impact to agricultural resources relative to the environmentally superior Alternative 2. Furthermore, it would cause unique adverse impacts that could potentially be significant. The EIR reasonably declined to fully evaluate Alternative 3A.

8.2. Analysis of Environmental Impacts

8.2.1. Paramount Citrus

Paramount Citrus asserts that the EIR did not adequately consider Alternative 2's impact on agricultural resources, particularly citrus. Paramount Citrus contends that, contrary to the assumption in the EIR, other crops including citrus trees cannot be productively farmed in the new right of way. As stated in the final EIR's response to Paramount Citrus's comments to this effect, all crops that are currently grown in Alternative 2's new right of way, including citrus, are currently grown in the existing Rector-Big Creek right of way. (Final EIR, Response O19-3 at 5-22.) Paramount Citrus's contention that this is

irrelevant and insubstantial evidence that crops can be grown in the new right of way is without merit.

Paramount Citrus asserts that the EIR is deficient because it did not address the economic effects of the proposed project's physical impacts to agricultural productivity within the proposed project's rights of way, as permitted by CEQA Guideline § 15131. To the contrary, the EIR considered the impact of the proposed project on agricultural production in the rights of way and determined that, with mitigation, it is insignificant. (Final EIR at G-17 - G-18.)

Paramount Citrus asserts that the EIR does not adequately inform the public or decision makers about the extent of the project's impact on agricultural irrigation because, while Mitigation Measure 4.7-11b requires SCE to adjust the proposed right of way to avoid existing wells, the EIR defers an inventory of the impacted agricultural wells until a later time. Paramount Citrus offers no basis for us to conclude that this level of analysis is inadequate. To the contrary, the EIR identifies the potential for the proposed project to interfere with agricultural irrigation, and identifies mitigation for it, thus providing a sufficient degree of analysis to enable us to intelligently take into account the proposed project's impact on agricultural wells. (See CEQA Guideline § 15151.)

With regard to the EIR's analysis of impacts to local hydrology, Paramount Citrus asserts that the EIR incorrectly assumes that groundwater conditions throughout the San Joaquin Valley are uniform and the entirety of the project area overlies the San Joaquin aquifer and disregards comments by certified hydrologists opining that Alternative 3 is generally within in the alluvial area. To the contrary, the EIR explicitly recognizes that the hydraulic properties

of the aquifer are heterogeneous and can vary notably. (Final EIR, Master Response on Groundwater at 4.4-2, and Response O18-1 at 5-19 – 5-20.)

Paramount Citrus asserts that the EIR offers no analysis in support of its conclusion that pole installation will not substantially impact groundwater flow under Alternatives 1, 2 and 6. To the contrary, the EIR provides ample analysis in support of this conclusion. (Final EIR, Master Response on Groundwater at 4.4-1 – 4.4-3.)

Paramount Citrus asserts that the EIR errs in concluding that Alternative 3 will have greater adverse impacts on groundwater hydrology than Alternative 2. This assertion misstates the EIR, which concludes that, with mitigation, *none* of the alternatives has a significant adverse impact on groundwater hydrology; the EIR does not compare the alternatives' relative, but less than significant, impacts, nor is it required to do so under CEQA.⁹

With respect to the EIR's conclusion that dewatering during construction will not cause a significant impact, Paramount Citrus asserts that the EIR fails to consider that the land surface and groundwater surface in the vast regional aquifer are located downhill from the shallow aquifers that will be impacted by construction of Alternatives 1, 2 and 6. To the contrary, the EIR explains that all the alluvial areas within the project area are part of the same aquifer system. (Final EIR, Response O18-4 at 5-20 – 5-21.)

⁹ This argument also appears to contradict Paramount Citrus's assertion that pole installation under Alternatives 1, 2 and 6 will have greater adverse impacts on groundwater resources than under Alternative 3.

8.2.2. Visalia

Visalia asserts that the EIR is inadequate because it did not analyze the proposed project's inconsistencies with Visalia's General Plan policies and goals. To the contrary and as the EIR explained, CEQA does not require this analysis as Visalia does not have jurisdiction over the proposed project.

(Final EIR, Response O25-7 at 5-98, and Response O10-8 at 5-10.)

Visalia cites to *Application of Pacific Gas and Electric Company (PG&E) for CPCN for Jefferson-Martin 230 kV Transmission Project (2004) D.04-08-046 (Jefferson-Martin)* and *Application of San Diego Gas & Electric Company (SDG&E) for CPCN for Sunrise Powerlink Transmission Project (2008) D.08-12-058 (Sunrise Powerlink)* in support of its assertion that, in practice, the Commission closely analyzes inconsistencies between projects and general plans and often adopts mitigation to avoid them. More precisely, while Jefferson-Martin and Sunrise Powerlink considered such inconsistencies, they did so, not in the context of the environmental review of impacts to land use policies, but rather in the context of community values and for purposes, not of requiring additional mitigation, but rather of selecting the route alternative. Likewise, we address Visalia's assertions of the proposed project's inconsistencies with its General Plan in this context of community values for purposes of selecting a route alternative, as discussed in Section 9, below.

Visalia asserts that, in analyzing the proposed project's negative impacts on the city's aesthetic resources, the EIR did not adequately document the city's scenic views of the Sierra Nevada Range, or depict the proposed project's visual contrast against them, from various vantage points in the city and public recreational areas. The final EIR fully reflects Visalia's assertions and provides a thorough and reasonable explanation of its analysis. (Final EIR,

Responses O25-9 through O25-15 at 5-99 – 5-107.) Visalia’s disagreement with the EIR’s analysis does not make the EIR inadequate. (CEQA Guideline § 15151.)

Visalia asserts that the EIR erroneously concludes there would be no impact because there are no “designated” scenic vistas in the vicinity of the proposed project. To the contrary, the EIR appropriately identified scenic resources (including scenic vistas) in two ways: by evaluating a visual resource’s visual quality, viewer types and volumes, and viewer exposure (Draft EIR at 4.1-1 – 4.1-2), and by identifying visual resources that have been designated as “scenic” in a city or county general plan or zoning ordinance (*id.* at 4.1-21 – 4.1-23). While the EIR did not identify any “designated” scenic vistas in the vicinity of the proposed project, it identified numerous scenic resources in the area and adopted mitigation measures to reduce the project’s adverse impact on them. (*Id.* at 4.1-38 – 4.1-52.)

Visalia notes that, independent of CEQA, Pub. Util. Code § 1002(a) imposes on the Commission the duty to consider the proposed project’s impacts to recreation resources and aesthetic values; Visalia asserts those impacts are highly relevant and must be mitigated “in this context.” To be sure, these impacts are highly relevant and we consider them. However, as set forth in the scoping memo for this proceeding and consistent with Commission precedent,¹⁰ we do so in the course of our environmental review pursuant to CEQA.

Visalia contends that the EIR is inadequate because it did not identify the impact of Alternatives 2, 3 and 6 on the planned River Run Ranch

¹⁰ *Application of Lodi Gas Storage for CPCN for Gas Storage Facilities (2000) D.00-05-048 (Lodi Gas Storage) at 28.* (“[T]he appropriate place for the parties to address [project’s

Footnote continued on next page

development as significant or, consequently, require mitigation to avoid or lessen it. Visalia presented evidence that these project alternatives will reduce the value of homes selling in this planned development by an estimated \$600,000 to \$1 million. Visalia asserts that this situation is similar to the situation in *Application of SCE for CPCN for Tehachapi-Vincent Transmission Project (2007) D.07-03-045 (Tehachapi-Vincent)*, in which the Commission found that the proposed transmission project would have impeded construction of a planned development and required alternative project routing to avoid that impact out of a concern about the associated adverse economic impact. More accurately, *Tehachapi-Vincent* found that the project alternative in question would have a significant and unavoidable impact on the planned residential development because it would preclude the use of land parcels within the new right of way. (*Tehachapi-Vincent* at 39-40.) Here, in contrast, the proposed project would not encroach on the planned development, and the EIR reasonably determined that the proposed project's proximity to the planned development does not cause a significant adverse impact; accordingly, no mitigation is required.

8.2.3. Farmersville

Farmersville asserts that the EIR did not adequately consider the economic and social impacts resulting from Alternative 1's bisection of the site of a planned commercial/industrial park in Farmersville because it inappropriately determines that the planned development is speculative. This assertion misstates the final EIR. In response to Farmersville's comments asserting that the transmission line's bisection of the site render it unsuitable for development, the

influence on environment] was in the EIR, so that the parties would not duplicate their efforts in both portions of the proceeding.”)

EIR explains why transmission lines are not incompatible with industrial and general development. (Final EIR, Response O10-7 at 5-10.) In response to a comment from William Pensar making the same assertion as Farmersville, the EIR states that *the commenter's assertion that Alternative 1 will render the site undesirable for the planned development* is speculative. (Final EIR, Response I66-2 at 6-37.) The EIR adequately assessed the economic and social impacts resulting from Alternative 1's bisection of the planned commercial/industrial park.

8.3. Sufficiency of Mitigation Measures

8.3.1. Paramount Citrus

Paramount Citrus asserts that revised Mitigation Measure 4.7-11b, which requires SCE to relocate wells that cannot be accommodated by adjusting the proposed right of way, is infeasible because it will be extremely difficult to locate sufficient well sites that will produce the same quantity and quality of water to be replaced, particularly in the bedrock areas of Alternatives 1, 2 and 6. Paramount Citrus argues that, as a result, those alternatives have a significant and unmitigated impact. The fact that a proposed mitigation measure may be difficult does not make it infeasible. Furthermore, it is speculative to assume that, in the event that SCE cannot adjust the proposed right of way to avoid existing wells, it will not be able to locate replacement well sites.

8.3.2. Farm Bureau

Farm Bureau recommends that, in consideration of Tulare County agricultural interests, the Commission should establish an agricultural advisory committee comprised of existing agricultural organizations, community based groups that have emerged as a result of the proposed project, other participants that have expertise in such areas as pest control, water well development and irrigation systems, and a limited number of individual growers; the committee

would be expected to avoid or resolve many conflicts and reduce unavoidable project impacts. As stated in the EIR, the formation of such a committee does not meet CEQA Guideline § 15126.4(a)(2)'s requirement that mitigation measures be fully enforceable through permit conditions, agreements, or other legally binding instruments. We address the reasonableness of Farm Bureau's recommendation in the context of our consideration of community values pursuant to Pub. Util. Code § 1002(a)(1) in Section 9, below.

Farm Bureau suggests that Mitigation Measure 4.7-11b requires revision in order to ensure its enforceability. Specifically, in the event that the project requires replacement of a groundwater well, Mitigation Measure 4.7-11b requires SCE to demonstrate that the new location is capable of producing water of equal quantity and quality. Farm Bureau, along with PACE, asserts that the measure should be revised to prohibit SCE from commencing construction until it satisfies this requirement, in order to meet the requirement of CEQA Guideline § 15091(d) that it be enforceable. The mitigation measure, as written, does not appear to be unenforceable, Farm Bureau and PACE do not articulate how or why it is unenforceable, and the recommended revision would unreasonably delay commencement and completion of the project. For these reasons, we reject Farm Bureau's and PACE's recommendation.

Farm Bureau notes that revised Mitigation Measure 4.3-1b requires SCE to obtain approval of its use of chemicals near agricultural areas from the Tulare County Farm Bureau, and submits that the correct authority is the Tulare County Agricultural Commissioner, who is tasked with the enforcement of state regulation of the safe use of pesticides. We make that correction.

Farm Bureau recommends that the Dispute Resolution Process contained in the mitigation program be revised to "provide for an expedited

resolution process” and to establish “a separate process and Commission designee [...] for time sensitive issues.” As written, the Dispute Resolution Process provides, as the first step in the event of a compliance dispute, the dispute shall be directed to the Commission’s designated project manager for informal resolution. In the event that informal resolution is unsuccessful, an affected party may seek resolution by the Commission’s Executive Director (the Executive Director or designee shall meet with the parties within 10 days of notice of dispute, and subsequently issue an Executive Director’s Resolution); if unsatisfied by the Executive Director’s Resolution, an affected party may appeal it to the full Commission. Step one of the Dispute Resolution Process provides a reasonable opportunity for speedy informal resolution by a Commission designee, which reasonably addresses Farm Bureau’s concern.

Farm Bureau takes issue with the mitigation measure addressing walnut productivity in the rights of way. Specifically, as walnut trees cannot be productive when cropped to the 15-foot height restriction for trees located within transmission rights of way,¹¹ Mitigation Measure 4.2-4 requires increasing the height of project structures to allow for a maximum walnut tree height of 30 feet to be maintained beneath the 220 kV conductor, which the EIR determines will mitigate this impact to a less than significant level. Farm Bureau asserts that this measure is as ambiguous as the 15-foot height restriction because it does not state if it is a maximum or minimum height. In view of our extensive experience with General Order 95 (initially adopted in 1941), we reject Farm Bureau’s assertion that the height restriction is ambiguous. Farm Bureau asserts that the measure

¹¹ See General Order 95.

unduly presumes that all walnut trees will maintain the same productivity level based on the same height. To the contrary, Mitigation Measure 4.2-4 explicitly recognizes that the pruning may reduce productivity to varying degrees and thereby result in an economic impact to farmers; those impacts would be addressed by SCE during its right of way acquisition process.

Farm Bureau asserts that the final EIR misinterpreted its comment addressing apiaries, and “reiterates the recommendation to notify landowners in advance of energization to ensure hives are adequately distanced during energization to avoid disruption.” To the contrary, Farm Bureau’s comment on the draft EIR makes no such recommendation. Its comment notes concern with the impact of power line electric fields generally on bees, recommends that SCE be required to survey the approved route to determine if apiaries will be potentially impacted, and suggests that this would be an impact on which its proposed agricultural advisory committee might beneficially consult. (Final EIR, Comment Letter 020, p. 10.) The EIR reasonably interpreted and responded to

Farm Bureau's comment.¹²

Farm Bureau suggests that Mitigation Measure 4.2-2, which requires SCE to obtain one acre of agricultural conservation easements for every acre of permanently converted farmland that is converted prime farmland, should be revised to mandate that SCE obtain those easements through an existing conservation bank. Farm Bureau offers no rationale for restricting SCE's options in this manner, and none is apparent to us. We reject Farm Bureau's recommendation.

8.3.3. Visalia

Visalia asserts that, in consideration of the community's values of maintaining its unique scenic vistas and small town characteristics and providing for orderly growth, open space and park lands, the EIR should require mitigation measures including the development of a landscaped, open space parkway, the formation of a conjunctive use committee, and other visual relief measures. The purpose of the EIR is to identify significant environmental impacts and measures, if any, to mitigate them. As discussed previously, the EIR properly determined that, as mitigated, the proposed project will not significantly impact Visalia's aesthetic resources or relevant land use policies. We address the issue of whether Visalia's recommendations are mandated by

¹² Farm Bureau suggests that this is an example of the type of process with which an agricultural advisory committee could assist. Although we do not require the establishment of an agricultural advisory committee as a condition of project certification, we invite Farm Bureau to bring these types of suggestions to SCE's attention throughout the construction process, and we expect SCE to be responsive to reasonable community concerns.

our consideration of community values pursuant to Pub. Util. Code § 1002(a)(1) in Section 9.2, below.

Visalia asserts that, consistent with General Order No. 131-D, Section XIV.B and *Application of SCE for CPCN for Devers-Palo Verde No. 2 Transmission Line Project (2007) D.07-01-040 (Devers-Palo Verde No. 2)*, the Commission should require SCE to consult with Visalia to resolve conflicts between the project and the city's General Plan. To the contrary, Section XIV.B does not mandate such consultations. Rather, Section XIV.B's mandate concerns jurisdictional disputes between the utility and local agencies. As the EIR correctly explains, while a utility project is not subject to local land use plans, it must obtain any required non-discretionary local permits; Section XIV.B requires the utility to consult with the local agency in the event that there is a dispute regarding whether such non-discretionary local land use permits are required. Accordingly, in *Devers-Palo Verde No. 2*, the utility and the tribal authority disputed whether the utility was required to obtain a conditional use permit for the tribal land, and the Commission appropriately adopted the mitigation measure that invoked Section XIV.B. (*Devers-Palo Verde No. 2* at 91-92.) In contrast, in this matter, there is no jurisdictional dispute between Visalia and SCE.

8.4. Identification of Environmentally Superior Alternative

SCE argues that Alternative 1 is the environmentally superior alternative because, while all of the alternatives require the same mitigation to address their potential impacts to cultural and agricultural resources, Alternative 1 is the only alternative that has no potential impact to biological resources. In its comments on the proposed decision, SCE elucidates its argument by stating that, as none of the alternatives avoids or substantially

lessens a significant impact to cultural or agricultural resources, they should be considered to be on par with respect to those impacts; and, as only Alternative 1 avoids the potential for biological impacts, it should be found to be superior to all other alternatives including those that, with mitigation, avoid or substantially lessen their potential biological impact. By this logic, an alternative that impacts a thousand acres of agricultural resources may be deemed to be on par with an alternative that impacts a single acre. Furthermore, it is not apparent that an alternative that never poses a potential environmental impact is environmentally superior to one that, with mitigation, succeeds in entirely avoiding it. We disagree that the Commission should (and CEQA permits it to) ignore the relative ultimate impacts of alternatives in identifying the environmentally superior alternative, and reject SCE's argument that Alternative 1 is the environmentally superior alternative.

9. Infeasibility of Environmentally Superior Alternative

9.1. Route Selection

9.1.1. SCE

SCE argues that all of the alternatives except Alternative 1 are infeasible in terms of being able to meet the project objectives in the necessary timely fashion. SCE asserts that there is an urgent need to address current reliability issues in the electrical service area. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 megawatts (MW), and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single-contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need

for rolling outages and/or customer blackouts in the area served by Rector Substation.

SCE asserts that all of the alternatives except Alternative 1 risk significant delay. First, all of the alternatives except Alternative 1 cross critical biological habitat, requiring environmental surveys that, according to SCE, could take two years to conduct. Furthermore, if the surveys determine listed species are present, SCE states that permitting could take an additional one to two years if a federal nexus establishes U.S. Army Corps of Engineers jurisdiction, or an additional five to 10 years if there is no federal nexus. Second, based on SCE's proposed labor resources and work schedule for the initial demolition and construction associated with the replacement of existing transmission infrastructure north of Rector Substation, Alternative 1 would involve approximately three months of outages as compared to 10, 13 and 8 months, respectively, for Alternatives 2, 3 and 6. In turn, these longer construction durations create a greater risk of further delay as the result of mitigation requiring SCE to avoid interfering with raptor nesting and optimum crop growing seasons. SCE testified that, while it might be possible to shorten the duration of construction activities by increasing the labor crews and extending the work schedule, this increase in construction activity may impact SCE's ability to successfully implement some of the necessary mitigation measures.

On the other hand, peak demand load has dropped since 2007, and the California Energy Commission's most recent adopted forecast of California energy demand projects SCE's per capita peak demand to remain relatively flat through the 2018 horizon without returning to the 2007 levels.¹³ While the risk that construction will be delayed to the extent SCE speculates is possible, it is also possible that any incremental delay will be much more modest. For example, as SCE notes, it is possible to accelerate construction by increasing labor crews and work schedules. Furthermore, it is possible and, according to SCE, even likely that permitting for Alternative 2 will be subject to the jurisdiction of the U.S. Army Corps of Engineers,¹⁴ which would not implicate the five to 10 year delay that SCE suggests might otherwise be required.

While "sooner" is certainly "better" with respect to addressing our current reliability concerns, we are keenly aware that, for practical purposes, a transmission line "is forever." On balance, we find that the need to address current reliability concerns does not render any of the alternatives infeasible.¹⁵

¹³ We grant PACE's request for official notice of the *California Energy Demand 2010-2020 Adopted Forecast*, California Energy Commission, CEC-200-2009-012 (December 2, 2009).

¹⁴ "Although uncertain at this time, impacts to vernal pool habitats or jurisdictional drainages resulting from construction of Alternative 2 would likely [be subject to the jurisdiction of the U.S. Army Corps of Engineers]." (Application 08-05-039, Proponent's Environmental Assessment, Section 4.4 at 4-118.)

¹⁵ SCE suggests that Alternative 1's significantly lower cost as compared to Alternative 2 is an important consideration to the identification of the environmentally superior alternative. To the contrary, economic impacts of a proposed project are not by themselves environmental impacts (CEQA Guideline § 15131) and therefore not relevant to the determination of the environmentally superior alternative. The appropriate context for consideration of this cost difference is with respect to project feasibility. (CEQA Guideline § 15091(a)(3).) However, SCE does not assert, and we do not find, that Alternative 2 is economically infeasible.

9.1.2. Farm Bureau

Farm Bureau asserts that the strong value that the community places on its high value orchard crops is cause to select the route alternative that minimizes impacts to those crops. To the extent that Farm Bureau means to suggest that the Commission should consider Alternative 2's economic impacts to the agricultural community, Farm Bureau does not assert, and we do not find, that the project's economic impact to orchard growers renders Alternative 2 infeasible. To the extent that Farm Bureau means to suggest that the community's relative support of an alternative is cause to select it, we do not view Pub. Util. Code § 1002(a)(1) as authorizing the selection of a project alternative on the basis of popularity. To the contrary, the issue is whether the project's impact will damage the community's character and identity. (See, e.g., *Lodi Gas Storage*, D.00-05-048 at 31-32, considering whether the presence of a natural gas storage facility would damage the community's winegrape growing reputation.) In this case, Farm Bureau does not assert, and we do not find, that Alternative 2 will damage community's character and identity as an agricultural community.

9.1.3. Farmersville

Farmersville objects to Alternative 1 because of its potential adverse impact on property values; its displacement of land designated for urban development that, in turn, would potentially be replaced with agricultural land; and its interference with the recreational opportunity afforded by a park and pond located along the transmission line route. Because we select Alternative 2, we do not reach this issue.

9.2. Additional Mitigation

Visalia and Farm Bureau invoke Pub. Util. Code § 1002(a)(1) as a basis to condition project certification on additional mitigation measures, regardless of the selected project alternative. Visalia recommends that, in consideration of the community's concerns regarding the proposed project's impact on Visalia's open-space values, recreation and aesthetics, the Commission should require SCE to develop and dedicate to the City a landscaped open space pathway under the transmission line; form a conjunctive use committee to identify landscaping and other measures for SCE to implement; and develop, in consultation with a designated visual specialist and Visalia, a visual relief plan that would specify appropriate structure surface treatments and vegetative screening. Similarly, Farm Bureau requests that, in consideration of the agricultural community's concerns, the Commission require the establishment of an agricultural advisory committee to provide input into the details of implementing the agricultural mitigation measures identified in the EIR.

We deny these requests. Visalia and Farm Bureau do not demonstrate and we do not find that Alternative 2, or any of the alternatives, damages the community's agricultural, recreational or aesthetic character. To the extent that it would be located in Visalia, the proposed project would lie within an existing transmission right of way, and the EIR appropriately determines that, with mitigation, the project's impacts to recreational and aesthetic resources are less than significant. While Alternative 2 will convert 25.6 acres of farmland to non-agricultural use, this cannot reasonably be found to thereby damage Tulare County's agricultural character.

Farm Bureau asserts that the mitigation monitoring, reporting and compliance program requires greater transparency, and recommends that it be

revised to provide that all landowners impacted by the project will be provided a copy of the dispute resolution procedures, compliance requirements, and SCE's plans and documentation submitted to the Commission. While Farm Bureau's further recommendation is unduly burdensome, it is reasonable to provide the impacted landowners with a copy of the mitigation monitoring, reporting and compliance plan. We direct Energy Division to serve the mitigation monitoring, reporting and compliance program on all landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

10. Overriding Considerations

Pursuant to CEQA Guidelines § 15093, the Commission may only approve a project that results in significant and unavoidable impacts upon a finding that there are overriding considerations. As discussed previously, this project is needed in order to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor. On June 24, 2004, the California Independent System Operator Board of Governors approved the looping of the Big Creek 3-Springville 220 kV transmission line into the Rector Substation as the preferred long-term transmission alternative to address identified reliability concerns. The Big Creek 3-Rector 220 kV transmission line's maximum allowable capability under base-case conditions is 700 MW, and the recorded peak load at Rector Substation was 701 MW on July 10, 2008. Under the worst-case single contingency outage scenario (one transmission line out of service), the Big Creek 1-Rector 220 kV could exceed its emergency rating of 106%. The worst-case double-contingency outage scenario (two transmission lines out of service) could result in the need for rolling outages and/or customer blackouts in the area served by Rector Substation. For these reasons, we find that there are overriding considerations that support our adoption of the environmentally

superior project Alternative 2, despite its significant unavoidable impacts on agricultural and cultural resources.

11. EMF

The Commission has examined EMF impacts in several previous proceedings.¹⁶ We found the scientific evidence presented in those proceedings was uncertain as to the possible health effects of EMFs, and we did not find it appropriate to adopt any related numerical standards. Because there is no agreement among scientists that exposure to EMF creates any potential health risk, and because CEQA does not define or adopt any standards to address the potential health risk impacts of possible exposure to EMFs, the Commission does not consider magnetic fields in the context of CEQA and determination of environmental impacts.

However, recognizing that public concern remains, we do require, pursuant to GO 131-D, Section X.A, that all requests for a certificate of public convenience and necessity (CPCN) include a description of the measures taken or proposed by the utility to reduce the potential for exposure to EMFs generated by the proposed project. We developed an interim policy that requires utilities, among other things, to identify the no-cost measures undertaken, and the low-cost measures implemented, to reduce the potential EMF impacts. The benchmark established for low-cost measures is 4% of the total budgeted project cost that results in an EMF reduction of at least 15% (as measured at the edge of the utility right-of-way).

¹⁶ D.06-01-042 and D.93-11-013.

The proposed project, including Alternative 2, is designed to include the following no-cost and low-cost magnetic field reduction measures:

1. Use a double-circuit pole-head configuration for the proposed 220 kV lines;
2. Use poles which are 10 feet taller where homes are immediately adjacent to the edges of the right of way; and
3. Implement phasing arrangements to reduce magnetic field levels at the edges of rights of way.

This design plan is consistent with the Commission's EMF Design Guidelines and policies, and also with recommendations made by the U.S. National Institute of Environmental Health Sciences and applicable national and state safety standards for new electric facilities.

12. Project Cost

For projects estimated to cost more than \$50 million, Pub. Util. Code § 1005.5(a) directs the Commission to specify a reasonable and prudent maximum project cost. In its July 20, 2009, prepared testimony, SCE forecasted the cost of Alternative 2 to be \$137.443 million (in constant 2009 dollars excluding Allowances for Funds Used During Construction (AFUDC)). This is based on direct costs of \$97.907 million plus a 30.6% contingency (\$29.947 million), plus Pensions & Benefits and Administrative & General costs (\$9.589 million). SCE notes that this figure does not take into account costs that may be required due to mitigation not identified at the time or final engineering, and requests the opportunity to update its cost estimate by advice letter once final engineering is complete.

Farm Bureau challenges the reasonableness of SCE's forecast of Alternative 2's costs for its use of a 30.6% contingency. Farm Bureau cites to

Tehachapi Renewable, D.09-12-044, which rejects SCE's proposed 35% contingency in that application, and instead adopts a 15% contingency, as follows:

SCE requests contingency costs equal to 32% of total project costs excluding AFUDC, P&B, A&G costs. We believe this is too high for several reasons. First, the Project consists primarily of new transmission and substation facilities. California electric utilities and their construction contractors have extensive experience with this type of project.

In light of the extensive experience of California electric utilities and their industry partners in constructing transmission lines and substations, we are not convinced that a contingency of 32% is reasonable. Generally, by the time an electric utility files an application for authority to construct a power line or substation, the utility should know the final cost of the proposed project to within 15%. This is particularly true for the Project given that it will be constructed largely on existing rights of way. There should be little uncertainty regarding the cost to acquire land and rights of way for the project, and SCE has had access to most or all of route for planning, design, and engineering purposes.

Second, we believe that SCE's contingency of 32% is excessive in the current economic environment. A major purpose of SCE's contingency is to budget for the risk of significant increases in the cost of labor and materials. We believe this risk is small given that the unemployment rate in California is more than 12% and construction activity in the State is at recessionary levels. It is difficult to imagine a credible scenario where the cost of labor and materials increases by 32% over the course of the Project. In our opinion, a contingency of 15% for labor and materials is sufficient under present economic circumstances.

Finally, a contingency of 15% is consistent with Commission precedent. For example, D.08-12-058

adopted a contingency of 18.35% for SDG&E's Sunrise Powerlink Project, D.07-01-040 adopted a contingency of "almost 15%" for SCE's Devers-Palo Verde No. 2 Project, and D.01-12-017 adopted a contingency of 14.6% for PG&E's Northeast San Jose Project.

(*Tehachapi Renewable* at 70-71, citations omitted.)

Tehachapi Renewable went on to adopt the 15% contingency, but authorized the utility to seek an adjustment of the maximum reasonable and prudent costs once it had developed a final detailed engineering design-based construction estimate for the approved project route. (*Id.* at 90-91 and Conclusion of Law 26.)

This rationale applies equally to the facts of this application: SCE is experienced in constructing transmission lines and substations, Alternative 2 will be constructed largely on existing rights of way, and California unemployment remains high. For these reasons, we adopt a contingency of 15%, and apply it to the forecasted direct cost of \$97.907 million. We adopt as reasonable and prudent a maximum cost of \$122.182 million (excluding AFUDC). Once SCE has developed a final detailed engineering design-based construction estimate for Alternative 2, SCE may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to § 1005.5(b).

13. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on May 24, 2010, by SCE, PACE, Visalia, Farm Bureau, and Paramount Citrus. Reply comments were filed on June 1, 2010, by SCE, Farm Bureau, and Paramount Citrus. We have considered the comments and, to

the extent that they identified factual, legal or technical error in the proposed decision, we have made appropriate changes.

14. Assignment of Proceeding

Dian M. Grueneich is the assigned Commissioner and Hallie Yacknin is the assigned ALJ in this proceeding.

Findings of Fact

1. Construction of a 220 kV transmission line to loop to the Big Creek 3-Springville 220 kV transmission into the Rector Substation is necessary in order to address reliability concerns in the Big Creek Corridor.

2. Project Alternatives 1, 2, 3, 3A and 6 would each have significant unavoidable impacts on agricultural and cultural resources.

3. Project Alternatives 1, 2, 3, 3A and 6, respectively, would permanently remove 31.9 acres, 25.6 acres, 18.2 acres, 21.8 acres and 31.6 acres of prime farmland, unique farmland, and farmland of statewide importance as that farmland is defined by the Department of Conservation.

4. In addition to its significant unavoidable impacts on agricultural and cultural resources, Alternative 3 would have significant unavoidable impacts on biological resources.

5. In addition to its significant unavoidable impacts on agricultural and cultural resources, Alternative 3A would have potentially significant and unavoidable impacts on land use and aesthetic resources.

6. Alternative 2 is the environmentally superior alternative.

7. The EIR was completed in compliance with CEQA.

8. The Commission has reviewed and considered the information contained in the EIR.

9. The EIR reflects the Commission's independent judgment.

10. Alternative 2 is feasible.

11. The need to reduce the possibility of overloads on existing 220 kV transmission lines in the Big Creek Corridor is an overriding consideration that supports our approval of Alternative 2, despite its significant unavoidable impacts. As such, the benefits of Alternative 2 outweigh and override its significant and unavoidable impacts.

12. Alternative 2 includes no-cost and low-cost measures (within the meaning of D.93-11-013, and D.06-01-042) to reduce possible exposure to EMF.

13. The reasonable and prudent cost of Alternative 2 is \$122.182 million.

Conclusions of Law

1. SCE should be granted a CPCN for Alternative 2 of the proposed San Joaquin Cross Valley Loop Transmission Project, with mitigation set forth in the Mitigation Monitoring, Reporting and Compliance Program (MMRCP), which is attached as Attachment 1 to this decision.

2. Mitigation Measure 4.3-1b of the MMRCP should be revised to require SCE to obtain approval of its use of chemicals near agricultural areas from the Tulare County Agricultural Commissioner, as opposed to the Tulare County Farm Bureau.

3. Energy Division should be directed to serve the MMRCP on all landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

4. The EIR has been completed in compliance with CEQA and should be certified.

5. The maximum cost of the project should be set at \$122.182 million, excluding AFUDC.

6. Once SCE has developed a final detailed engineering design-based construction estimate for Alternative 2, SCE may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to § 1005.5(b).

7. The unopposed October 2, 2009, motion of SCE to correct the transcript of the August 31, 2009, evidentiary hearing and the unopposed motion of Paramount Citrus to accept its late-filed opening brief should be granted.

8. A.08-05-039 should be closed.

9. This order should be effective immediately.

O R D E R

IT IS ORDERED that:

1. Southern California Edison Company is granted a Certificate of Public Necessity and Convenience to construct the San Joaquin Cross Valley Loop Project Alternative 2 in conformance with the Mitigation Monitoring, Reporting and Compliance Plan, which is attached as Attachment 1 to this decision.

2. The final Environmental Impact Report (which incorporates the draft Environmental Impact Report) is adopted pursuant to the requirements of the California Environmental Quality Act.

3. Mitigation Measure 4.3-1b of the Mitigation Monitoring, Reporting and Compliance Plan is revised to require Southern California Edison Company to obtain approval of its use of chemicals near agricultural areas from the Tulare County Agricultural Commissioner, as opposed to the Tulare County Farm Bureau.

4. The Mitigation Monitoring, Reporting and Compliance Plan, as modified in Ordering Paragraph 3 and which is attached to this decision, is adopted.

5. Energy Division shall cause a copy of the Mitigation Monitoring, Reporting and Compliance Plan to be served on all identified landowners within 300 feet of Alternative 2, as identified in Attachment 2 to this decision.

6. The maximum cost of the project is set at \$122.182 million, excluding Allowances for Funds Used During Construction.

7. Once it has developed a final detailed engineering design-based construction estimate for Alternative 2 of the San Joaquin Cross Valley Loop Transmission Project, Southern California Edison Company may, within 30 days, file with the Commission an advice letter with the revised cost estimate and seek an adjustment of the maximum reasonable and prudent costs pursuant to Public Utilities Code Section 1005.5(b).

8. Application 08-05-039 is closed.

This order is effective today.

Dated July 29, 2010, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
NANCY E. RYAN
Commissioners

I reserve the right to file a dissent.

/s/ TIMOTHY ALAN SIMON
Commissioner

I dissent.

/s/ JOHN A. BOHN
Commissioner

ATTACHMENT 1

ATTACHMENT 2

ABAA VISALIA RANCH L P
15430 RD 296
VISALIA, CA 93292

ADAMS, DANIEL S & CYNTHIA A
33251 RD 148
VISALIA, CA 93291

ADNEY, BRIAN & JODY (TRS)
35599 RD 150
VISALIA, CA 93292

AKIN, BRUCE G & DENISE M
32950 RD 148
VISALIA, CA 93292

ALCAZAR, HOMERO & VERONICA
1520 SO RIO LINDA ST
VISALIA, CA 93292

ALSING, JUDY
14851 AVE 312
VISALIA, CA 93292

ALTER, ROGER C & SUSAN E
14765 AVE 296
VISALIA, CA 93292

DANA, WARREN
1840 S CENTRAL AVE
VISALIA, CA 93277

REAL PROP & ADMIN SVCS
P O BOX 410
LONG BEACH, CA 90801

AVILA, FIDENCIO P & YOLANDA M
1534 S RIO LINDA
VISALIA, CA 93292

AWBREY, JOSHUA
310 NO ARROYO ST
VISALIA, CA 93292

AYRES, MICHAEL & ALISA
4419 E WILDWOOD CT
VISALIA, CA 93292

BENBOW, WINONA A (TR EXPT TR)
8700 SO BUTTE RD
SUTTER, CA 95982

BENEDICT, RICHARD G & ILA M
31345 TOWER RD
VISALIA, CA 93292

BENITE,Z JOSE A & MARICELA
206 N ARROYO ST
VISALIA, CA 93292

BERRY, JOE F & NANCY
32077 RD 144
VISALIA, CA 93292

BJ NUT FARM LLC
15832-C MILLS DR
VISALIA, CA 93292

BLAIN FARMING CO INC
P O BOX 507
VISALIA, CA 93279

BLANKENSHIP, JACK L
31350 N TOWER RD
VISALIA, CA 93292

BOROWSKI, JANE
31231 TOWER RD
VISALIA, CA 93291

BOS, H ANTHONY
14722 AVE 328
VISALIA, CA 0

BRATSCH, PAUL J & DORIS J
31174 TOWER ROAD
VISALIA, CA 93291

BRIDGES, ROGER E & AUDREY L (TRS)
29002 RD 156
VISALIA, CA 93292

BRITTAIN, DELBERT E & MARY E (TRS)
14797 D AVE 296
VISALIA, CA 93292

BROOKSHIRE, JACK D & JOANN
31190 N TOWER RD
VISALIA, CA 93291

BROWN, DONALD L & ANGELA M
31255 TOWER RD
VISALIA, CA 93292

BURGER, HAROLD DEAN & JULIE
31031 TOWER RD
VISALIA, CA 93291

C/O BRYON FOX
14608 AVE 328
VISALIA, CA 93292

C/O CLARINDA J HART
18400 AVE 352
WOODLAKE, CA 93286

C/O CLAUDE E ATKINS
15430 AVE 296
VISALIA, CA 93292

C/O GEORGE J PERRY (TR)
6343 W MINERAL KING AVE
VISALIA, CA 93291

C/O JAN SMITH
707 W ACEQUIA
VISALIA, CA 93291

C/O LOUIS WHITENDALE
15199 AVE 292
VISALIA, CA 93292

C/O PARAMOUNT CITRUS ASSOC
1901 S LEXINGTON ST
DELANO, CA 93215

C/O PCA-NE315
1901 S LEXINGTON
DELANO, CA 93215

C/O PCA-NE315
5001 CALIFORNIA AVE #230
BAKERSFIELD, CA 93309

C/O ROLL INTERNATIONAL CORP
11444 W OLYMPIC BLVD 10TH FL
LOS ANGELES, CA 90064

C/O SANDRA T ROSALES (TR)
3361 BAGLEY AVE UNIT #15
LOS ANGELES, CA 90034

CALDERON, OSMIN
30923 TOWER RD
VISALIA, CA 93291

CALVIN INC
PO BOX 5379
FRESNO, CA 93755

CARTER, TOMMY & KIM L
1142 SO RIO LINDA ST
VISALIA, CA 93292

CASTLEWOOD PARTNERS INC
P O BOX 2622
VISALIA, CA 93292

CENTEX HOMES
1840 S CENTRAL AVE
VISALIA, CA 93277

CENTRAL VALLEY RANCH
2216 HYDE AVE
VISALIA, CA 93291

CHARTER OAK CORPORATION
411 N SUTTER COURT
VISALIA, CA 93291

CLEMENTS, HAROLD & LEONA (TRS)
891 S MC AULIFF RD
VISALIA, CA 93292

CLEMENTS, PEGGY (TR)
891 S MC AULIFF
VISALIA, CA 93292

COLEY, JAMES R
30971 TOWER RD
VISALIA, CA 93292

COLUCCI, ANTONIO F & ROSE C
33150 RD 132
VISALIA, CA 93292

CONTRERAS, FELIPE DE JESUS & HERMILL
4438 E DOUGLAS CT
VISALIA, CA 93292

COOPER, CHRISTOPHER
1416 S RIO LINDA CT
VISALIA, A 93292

COTTLE, WILLIAM L
P O BOX 1012
EXETER, CA 93221

COVE RANCHES LP
2216 HYDE AVENUE
VISALIA, CA 93291

COX, PHILLIP R
1328 S RIO LINDA CT
VISALIA, CA 93277

D & J FARMS
34441 RD 176
VISALIA, CA 93292

DANIEL, ELDON
100 WILLOW PLAZA SUITE 400
VISALIA, CA 93291

DAVIS, ALICE PATRICIA
4414 E CECIL CT
VISALIA, CA 93291

DAVIS, DAN & KATHY
4411 E CECIL CT
VISALIA, CA 93291

DAVIS,LARRY & ALICE P
4414 E CECIL CT
VISALIA, CA 93292

DE JONG, ARIE & BRENDA
37455 RD 144
VISALIA, CA 93292

DE JONGE, NEIL S & CARLA G
31142 TOWER RD
VISALIA, CA 93291

DEAN, ZACHARY D
1126 S RIO LINDA ST
VISALIA, CA 93292

DEIMLER, JAMES D & JULIA
14723 AVE 344
VISALIA, CA 93291

DENNIS, BRUCE M & SHARYN D
37319 RD 192
WOODLAKE, CA 93286

DEPT OF INTERIOR - W & P R S
2800 COTTAGE WAY
SACRAMENTO, CA 95825

DIR, DALE B & BILLIE
P.O. BOX 10447
BAINBRIDGE ISLAND, WA 98110

DOUGLASS, RONALD W & BEVERLY J
(TRS)
30955 TOWER RD
VISALIA, CA 93292

DOWLING, H WILLIAM & VIRGINIA O
35599 1/2 ROAD 150
VISALIA, CA 93291

DREO, JAMES & WYONELL J
32951 RD 148
VISALIA, CA 93292

DUGGER, JAMES T & MARCIA L
14797 A AVE 296
VISALIA, CA 93292

DURHAM, CECIL & CHRISTINE
1706 S MICHAEL CT
VISALIA, CA 93292

DUVALL, DORIS
4428 E CECIL CT
VISALIA, CA 93292

ECKER, AARON & GINA
4330 E COLLEGE AVE
VISALIA, CA 93292

ECKES, GREGORY J & JEANNE
4423 E SYCAMORE CT
VISALIA, CA 93282

EGGLESTON, WILLIAM A & BOBBIE S
35599 ROAD 150 APT A
VISALIA, CA 93291

ENNIS LAND DEVELOPMENT LLC
643 N WESTWOOD ST
PORTERVILLE, CA 93257

EREDIA, JOSE B & CATHERINE M
14852 AVE 312
VISALIA, CA 93291

ERMIE, PAUL & ANDREA
31365 TOWER RD
VISALIA, CA 93292

ERNE, CHARLES A & HELEN A
14844 LIPSON AVE
VISALIA, CA 93292

ESTABROOKS, BRIAN & SHERRY
14870 AVE 360
VISALIA, CA 93291

EVANS, JUDITH L (SCSR TR)
248 E EVERGREEN
VISALIA, CA 93277

FIFE, RUBY E (TR)
34922 RD 152
VISALIA, CA 0

FLORES, JOE E
5788 LAWRENCE AVE
DINUBA, CA 93618

FORD, GLORIA
4432 E ROOSEVELT CT
VISALIA, CA 0

FOX, BYRON & KELLY
14608 AVE 328
VISALIA, CA 93291

FRY, STEVE A & SHAUNA
28868 RD 148
VISALIA, CA 93292

FULTON, WESLEY MONROE & FLORENCE
ELV
4410 E DOUGLAS AVE
VISALIA, CA 93292

FUMIA, JOHN C & CATHERINE R (TRS)
1736 LAURELWOOD DR
San Jose, CA 95125

GARCIA, ALEXANDER & TERESA
14890 AVE 296
VISALIA, CA 93292

GARCIA, VAL
4433 E ROOSEVELT CT
VISALIA, CA 93292

GARRIDO, FRANCISCO P & INEZ P
836 S RIO LINDA ST
VISALIA, CA 93292

GATEWOOD, HENRY L
4420 E GROVE CT
VISALIA, CA 93292

GOMES, RICHARD J & BETTY L (TRS)
31121 TOWER RD
VISALIA, CA 93291

GONZALES, FERNANDO & MARYHELEN
1530 S RIO LINDA ST
VISALIA, CA 93292

GOOCH, DELILA R
14850 AVE 313
VISALIA, CA 93292

GORDEN, JAMES M & MARY A
P O BOX 44066
LEMON COVE, CA 93244

GRAVES, KURT & VICTORIA L
914 SO RIO LINDA ST
VISALIA, CA 93292

GRAY, CRECENCIA (SURV TR)
30907 TOWER RD
VISALIA, CA 93292

GREEN, IRA
15440 W LONGBOW DR
SHERMAN OAKS, CA 0

GUILLEN, RAYMOND T & SANDRA
4433 E SYCAMORE CT
VISALIA, CA 93292

GUTIERREZ, CHRISTOPHER J & NICOLE D
1608 E MONTE VISTA CT
VISALIA, CA 93277

GUTIERREZ, JORGE
500 NO ARROYO ST
VISALIA, CA 93292

GUTIERREZ, MANUEL OLIVA
31175 TOWER RD
VISALIA, CA 93292

GUTIERREZ, OMAR & MARIA
1444 TAMPICO AVE
SALINAS, CA 93906

HACOBIAN, DARWIN
19839 AVENUE 364
WOODLAKE, CA 93286

HAGGARD, GERALD C & KIM B
31081 TOWER RD
VISALIA, CA 93291

HAMILTON, STEVEN D
610 N COMSTOCK CT
VISALIA, CA 93292

HANCOCK, JON & KIMBERLEY
325 NO ARROYO ST
VISALIA, CA 93291

HANSON, MATTHEW A & GRACE
4416 E ROOSEVELT CT
VISALIA, CA 93292

HARPER, STEVE L & ANNE
4432 E RACE AVE
VISALIA, CA 93292

HARRELL, WENDELL H & WILMA J
31217 TOWER RD
VISALIA, CA 93291

HART, NORMAN & BARBARA (TRS)
14167 AVE 320
VISALIA, CA 93292

HART, ROBERT EARL
33857 ROAD 160
VISALIA, CA 93292

HASH, EULA MAE
15093 AVE 280
VISALIA, CA 93292

HAURY, JAMES O & PATRICIA M (TRS)
5704 W SWEET DR
VISALIA, CA 93291

HENGST, ROBERT H & LINDA L (TRS)
37900 MILLWOOD AVE
WOODLAKE, CA 93286

HENRY, ROBERT & SHELLY
324 NO ARROYO ST
VISALIA, CA 93292

HERNANDEZ, BERTHA E
846 S RIO LINDA
VISALIA, CA 93292

HERNANDEZ, OFELIA
P O BOX 107
WOODLAKE, CA 93286

HIGBEE, RICHARD E & DOROTHY J
4422 E MC KINLEY AVE
VISALIA, CA 93292

HILL, JAMES K
4425 E GROVE CT
VISALIA, CA 93292

HILVERS, NICKOLAS J JR & TRICIA
28852 RD 1480
VISALIA, CA 93292

HORNUNG, CRAIG S
3324 S JACKIE ST
VISALIA, CA 93277

HOUSMAN, JEFF & MARILYN
14935 AVE 312
VISALIA, CA 93292

HUGHES, THOMAS B & BEVERLEY G (TRS)
31357 TOWER RD
VISALIA, CA 93291

HUNSAKER, EDWARD B & JANET M
4344 E MEADOW LANE
VISALIA, CA 93292

HUSSMAN, RICHARD L
4434 E SYCAMORE CT
VISALIA, CA 93292

HUTCHERSON, JERRY & DEBRA L
31183 TOWER RD
VISALIA, CA 93291

HUTSON, JUDY ANNE
1108 S RIO LINDA
VISALIA, CA 93292

IBARRA, JORGE
1619 SOUTH 79TH LANE
PHOENIX, AZ 85043

INGRAM, WILLIAM G & JOYCE J (TRS)
3913 COUNTRY CLUB DR
LAKEWOOD, CA 90712

IRACHETA, VICENTE & GRACIA
438 NO ARROYO ST
VISALIA, CA 93292

JEFFERS, SUSAN L
804 POMEROY RD
NIPOMO, CA 93444

JENKINS, DUSTIN & KRISTINA M
4310 E LAUREL
VISALIA, CA 93291

JERNAGAN, WAYNE & SHERRIE
4402 E ROOSEVELT CT
VISALIA, CA 93292

JIMENEZ, LOUIS & LIZA M
4437 E MCKINLEY AVE
VISALIA, CA 93292

JIMENEZ, SIMON & MARIBEL
1526 S RIO LINDA ST
VISALIA, CA 93292

JOHN & ELEANOR BENETTI CO-TRS
1509 SAN ARDO DR
San Jose, CA 95125

JOHNSON, ALAN L & TRUDY C (TRS)
19109 AVE 300
EXETER, CA 93221

JOHNSON, C PAUL & SHIRLEY E (TRS)
31618 RD 148
VISALIA, CA 93291

KHAMNEUNGTHAL, VIENGXAY
414 N ARROYO ST
VISALIA, CA 93292

KING, GERALD D & LINDA A
31273 TOWER RD
VISALIA, CA 93292

KONG, DENNY M
210 NO ARROYO ST
VISALIA, CA 93292

KOSTER, DOUGLAS E & MARSHA J
3124 STEVENSON DR
PEBBLE BEACH, CA 93953

KUECHEL, ANNETTE MARIE
37297 RD 192
WOODLAKE, CA 93286

LAMBERT, CHRIS & ERIN E
920 SO RIO LINDA ST
VISALIA, CA 93292

LANDERS, LOREEN
28908 RD 148
VISALIA, CA 93292

LANGDON, RICHARD E JR
31173 TOWER RD
VISALIA, CA 93292

LARSEN, RICHARD M & MARY ANN (TRS)
P O BOX 22127
SAN DIEGO, CA 92192

LEE, BRENDA J
1544 S RIO LINDA ST
VISALIA, CA 93292

LEE, CHER
301 NO ARROYO ST
VISALIA, CA 93292

LEE, SARN
4405 E MCKINLEY
VISALIA, CA 93292

LEWIS, JOHN W & CHRYSTAL R
31203 TOWER RD
VISALIA, CA 93292

LOCKE, ROBERT E & KARON R
31001 TOWER RD
VISALIA, CA 93291

LOPEZ, ROSENDO N & MARTHA M
30939 TOWER RD
VISALIA, CA 93292

LORENTZEN, PAUL C (TR)
2627 E PRINCETON
VISALIA, CA 93292

LOZA, FILIBERTO & ERNESTINA D
1510 S RIO LINDA ST
VISALIA, CA 93292

LUCAS, EARL E (TR)
31181 TOWER RD
VISALIA, CA 93291

LUNA, CHRISTOVAN E
4430 E OAK AVE
VISALIA, CA 93292

LY, TAM
221 NO ARROYO ST
VISALIA, CA 93292

LYNCH, MICHAEL J & PATRICIA J
4422 E DOUGLAS AVE
VISALIA, CA 93292

MANES, WALTER S & DOROTHY E
30985 TOWER RD
VISALIA, CA 93291

MARSH, RICHARD & MICHELE
4338 E COLLEGE AVE
VISALIA, CA 93292

MARTINEZ, GLORIA
31280 TOWER RD
VISALIA, CA 93292

MARTINEZ, TINA M & RAY S
1030 SO RIO LINDA ST
VISALIA, CA 93292

MC BRIDE, NANCY
826 S RIO LINDA ST
VISALIA, CA 93292

MC NALLY, INVESTMENTS A CA CORP
1805 W MAIN
VISALIA, CA 93291

MEDINA, JOSE LUIS & JUANA
1430 S RIO LINDA CT
VISALIA, CA 93292

MEDLOCK, RONNIE G & ANTONETTE
14725 AVE 296
VISALIA, CA 93292

MILLER, TIM & JERUSHA
2944 E PERSHING CT
VISALIA, CA 93292

MIRTORABI, MASOUD
20058 VENTURA BLVD #124
WOODLAND HILLS, CA 91364

MORAN, FRANCISCO
3 INGRAHAM CT
WATSONVILLE, CA 95076

NEWBERRY, ELROY R & LUPE A
36667 RD 148
VISALIA, CA 93292

NEWBERRY, RUBY I (TR)
36777 RD 148
VISALIA, CA 93292

NGUYEN, THO VAN
2424 OLD CREST PLACE
San Jose, CA 0

NIBLETT, STEPHEN R & TERESA K
4626 W WALNUT AVE
VISALIA, CA 93277

NIETO, OMAR GARCIA
100 NO ARROYO ST
VISALIA, CA 93292

NORTHAM, PATRICIA B (TR)
31161 TOWER RD
VISALIA, CA 93291

NUNES, TONY A & MARY A
4436 E MC KINLEY AVE
VISALIA, CA 93292

OAKES DITCH COMPANY
P O BOX 366
FARMERSVILLE, CA 93223

OLMOS, DOMINGO & ALICE (TRS)
1020 RIO LINDA ST
VISALIA, CA 93292

PADRON, GILBERT & ELVIA
4413 E GROVE CT
VISALIA, CA 93292

PAREGIEN, CHARLES C JR & BARBARA R (
14637 AVE 336
VISALIA, CA 93292

PAREGIEN, STEVEN D & KERI L
15080 AVE 336
VISALIA, CA 93292

PARKS, RICHARD A & JEANETTE A
31329 TOWER RD
VISALIA, CA 93291

PELTZER, BARBARA A (TR)
34286 RD 188
WOODLAKE, CA 93286

PELTZER ENTERPRISES GEN PNP
17396 AVE 344
VISALIA, CA 93292

PELTZER GROVES INC
34286 RD 188
WOODLAKE, CA 93286

PEREZ, OCTAVIO & LUCY
P O BOX 2589
WATSONVILLE, CA 95077

POLICH, THOMAS H & THERESA J (TRS)
31045 TOWER RD
VISALIA, CA 93291

POTTS, MICHAEL R
36680 MILLWOOD DR
WOODLAKE, CA 93286

PULLIN, JASON & KARRY
1136 SO RIO LINDA ST
VISALIA, CA 93292

PUTNAM, TIMOTHY & TORY D
4418 E WILDWOOD CT
VISALIA, CA 93292

RABB BROS RANCH INC
P O BOX 736
SAN JOAQUIN, CA 93660

RABB FARMS LLC
P O BOX 736
SAN JOAQUIN, CA 93660

RAMIREZ, HUGO & LYNETTE M (CO-TRS)
28687 RD 148
VISALIA, CA 93292

RAMIREZ, NICOLAS & SAN JUANA
31315 TOWER RD
VISALIA, CA 93292

REYNOSO, BENJAMIN & LORENE
36612 ROAD 148
VISALIA, CA 93291

REYNOSO, FRANK
6038 N SPALDING
FRESNO, CA 93710

REYNOSO, JOSEPH D & CONCEPCION G
36646 ROAD 148
VISALIA, CA 93291

RICO, EDDIE
123 NO ARROYO ST
VISALIA, CA 93292

RITCHIE, DOYLE & WANDA
P O BOX 3191
VISALIA, CA 93278

ROBLES, JAIME & OLGA I
4421 E DOUGLAS AVE
VISALIA, CA 93292

RODRIGUEZ, BELIA
1440 SO RIO LINDA CT
VISALIA, CA 93291

RODRIGUEZ, JAVIER JR & RHONDA
4440 E CECIL CT
VISALIA, CA 93292

RODRIGUEZ, MIGUEL A & CHRISTIE L
313 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, REFUGIO & IMELDA
111 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, SAUL & CHRISTINA
4439 E CECIL CT
VISALIA, CA 93292

ROSALES, JENNIFER A & JORGE A
1540 S RIO LINDA ST
VISALIA, CA 93292

ROSE, HUDSON S & ELIZABETH J
P O BOX 36
YETTEM, CA 93670

RUVALCABA, ANNETTE
4427 E RACE AVE
VISALIA, CA 93292

SABAN, GENALYN
110 NO ARROYO ST
VISALIA, CA 93292

SALDANA, MARCELLO
2505 E GOSHEN AVE
VISALIA, CA 93292

SANCHEZ, AARON
1840 SO JULIE ANN
VISALIA, CA 93277

SANCHEZ, GUILLERMO & BERTHA (TRS)
4435 E WILDWOOD CT
VISALIA, CA 93292

SANCHEZ, JIM & DARLENE
402 NO ARROYO
VISALIA, CA 93292

SANGHA, SUKHDEV S & SEWA K
1604 S RIO LINDA ST
VISALIA, CA 93292

SANTELLAN, RUBEN D & ANITA M
4404 E WILDWOOD CT
VISALIA, CA 93291

SCHNEIDER, GERALD M & NANCY L
33651 RD 148
VISALIA, CA 93291

SCHNEIDER, PATRICIA R (TR)
846 N CHINOWTH
VISALIA, CA 93291

SCOTT, DANIEL J
1100 S RIO LINDA
VISALIA, CA 93292

SELIG, MARK
222 NO ARROYO ST
VISALIA, CA 93292

SHAWL, ROBERT M
33753 RD 188
WOODLAKE, CA 93286

SHIMAJI T, TOM & JUNE
14851 AVE 360
VISALIA, CA 93292

SHOCKENCY, GLENN & VALERIE
510 NO ARROYO ST
VISALIA, CA 93292

SILVEIRA, JOE N & MARIA F (TRS)
4417 E ROOSEVELT CT
VISALIA, CA 93292

SLOVER, FRED G & BONNIE (TRS)
15302 AVE 288
VISALIA, CA 93292

SLOVER, RAY S (TR)
14840 AVE 288
VISALIA, CA 93292

SOTO, JESUS R
4411 E DOUGLAS ST
VISALIA, CA 93292

SOUTHERN CALIFORNIA EDISON COMPANY
P O BOX 800
ROSEMEAD, CA 91770

STANIC, MUROSLAV M & KATARINA
5601 W HILLSDALE
VISALIA, CA 93291

STONE CORRAL IRR DIST
37656 RD 172
VISALIA, CA 93291

STROBEN, THOMAS S & LORETTA (TR)
31191 TOWER RD
VISALIA, CA 93291

SUAREZ, IRENE
4429 E OAK AVE
VISALIA, CA 93292

TARBELL, GARY L & COLENE
37050 RD 192
WOODLAKE, CA 93286

THE MARY E MELING FAMILY LTD
PARTNERSHIP
17456 AVE 344
VISALIA, CA 93292

THORNTON, DON JR
15088 LIPSON STREET
VISALIA, CA 93292

TIMMONS, ANTHONY D
4405 E WILDWOOD CT
VISALIA, CA 93292

TORREZ, RUBEN PEREZ
300 NO ARROYO ST
VISALIA, CA 93292

TRAVIOLI FAMILY FARMS LLC
45971 DRIVE 152
OROSI, CA 93647

TRAVO, SHARON K
1500 S RIO LINDA CT
VISALIA, CA 93292

TREVINO, ISAU & LILIA
6416 AVE 400
DINUBA, CA 93618

COUNTY OF TULARE
TULARE COUNTY COURTHOUSE
VISALIA, CA 93291

TULARE IRRIGATION COMPANY
1350 W SAN JOAQUIN
TULARE, CA 93274

TURNER, DON & DEBRA A
14767 AVE 344
VISALIA, CA 93291

VALDOVINOS, SANTIAGO & VELIA
426 NO ARROYO ST
VISALIA, CA 93292

VALENCIA, ERNESTO B
P O BOX 410604
SAN FRANCISCO, CA 94141

VALER, ORITO & KRISTY
4403 E ROOSEVELT
VISALIA, CA 93292

VCPG RANCH PARTNERS LP
P O BOX 2800
VISALIA, CA 0

VINCENT, CLAYTON & DOLORES
12212 PARADISE VILLAGE; PARKWAY SOUTH
UNIT 119-C
PHOENIX, AZ 85832

VISALIA CITRUS PACKING GROUP
P O BOX 2800
VISALIA, CA 0

CITY OF VISALIA
707 W ACEQUIA
VISALIA, CA 93291

VIVEROS, NICOLAS A
207 NO ARROYO ST
VISALIA, CA 93292

WALLEN, RANDOLPH
1012 S RIO LINDA ST
VISALIA, CA 93292

WALSH, SUSAN A
926 SO RIO LINDA
VISALIA, CA 93292

WATKINS, KEITH L & SUSAN L
14852 LIPSON AVE
VISALIA, CA 93292

WEBB, JAMES W & ELAINE T
31160 TOWERS RD
VISALIA, CA 93291

WEBER, EDWARD A & SYLVIA A
28932 ROAD 148
VISALIA, CA 93292

WELCH, CRAIG A & CYNTHIA D (TRS)
4406 MC KINLEY AVE
VISALIA, CA 93292

WELLS, MATHEW S & SALLY L
4435 E GROVE CT
VISALIA, CA 93277

WERNER, SANDRA R
36996 RD 156
VISALIA, CA 93292

WHITENDALE, CARL L & BARBARA
14899 AVE 296
VISALIA, CA 93292

WHITESIDE, KENNETH & PAMELA
P O BOX 726
WOODLAKE, CA 93286

WILEY, ALFORD L & KIM
1600 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, LISA
1004 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, RALPH R JR & MARLENE
14818 E JUDY LN
VISALIA, CA 93292

WILLIS, JOYCE E
31103 TOWER RD
VISALIA, CA 93292

WILLIS, SCOTT & LORI
31141 TOWER RD
VISALIA, CA 93292

WISE, STEVE A & LINDA E
P O BOX 2564
VISALIA, CA 93279

ZIRALDO, RANDY J
31017 TOWER ROAD
VISALIA, CA 93292

ABAA VISALIA RANCH L P
15430 RD 296
VISALIA, CA 93292

ADAMS, DANIEL S & CYNTHIA A
33251 RD 148
VISALIA, CA 93291

ADNEY, BRIAN & JODY (TRS)
35599 RD 150
VISALIA, CA 93292

AKIN, BRUCE G & DENISE M
32950 RD 148
VISALIA, CA 93292

ALCAZAR, HOMERO & VERONICA
1520 SO RIO LINDA ST
VISALIA, CA 93292

ALSING, JUDY
14851 AVE 312
VISALIA, CA 93292

ALTER, ROGER C & SUSAN E
14765 AVE 296
VISALIA, CA 93292

DANA, WARREN
1840 S CENTRAL AVE
VISALIA, CA 93277

REAL PROP & ADMIN SVCS
P O BOX 410
LONG BEACH, CA 90801

AVILA, FIDENCIO P & YOLANDA M
1534 S RIO LINDA
VISALIA, CA 93292

AWBREY, JOSHUA
310 NO ARROYO ST
VISALIA, CA 93292

AYRES, MICHAEL & ALISA
4419 E WILDWOOD CT
VISALIA, CA 93292

BENBOW, WINONA A (TR EXPT TR)
8700 SO BUTTE RD
SUTTER, CA 95982

BENEDICT, RICHARD G & ILA M
31345 TOWER RD
VISALIA, CA 93292

BENITE,Z JOSE A & MARICELA
206 N ARROYO ST
VISALIA, CA 93292

BERRY, JOE F & NANCY
32077 RD 144
VISALIA, CA 93292

BJ NUT FARM LLC
15832-C MILLS DR
VISALIA, CA 93292

BLAIN FARMING CO INC
P O BOX 507
VISALIA, CA 93279

BLANKENSHIP, JACK L
31350 N TOWER RD
VISALIA, CA 93292

BOROWSKI, JANE
31231 TOWER RD
VISALIA, CA 93291

BOS, H ANTHONY
14722 AVE 328
VISALIA, CA 0

BRATSCH, PAUL J & DORIS J
31174 TOWER ROAD
VISALIA, CA 93291

BRIDGES, ROGER E & AUDREY L (TRS)
29002 RD 156
VISALIA, CA 93292

BRITTAIN, DELBERT E & MARY E (TRS)
14797 D AVE 296
VISALIA, CA 93292

BROOKSHIRE, JACK D & JOANN
31190 N TOWER RD
VISALIA, CA 93291

BROWN, DONALD L & ANGELA M
31255 TOWER RD
VISALIA, CA 93292

BURGER, HAROLD DEAN & JULIE
31031 TOWER RD
VISALIA, CA 93291

C/O BRYON FOX
14608 AVE 328
VISALIA, CA 93292

C/O CLARINDA J HART
18400 AVE 352
WOODLAKE, CA 93286

C/O CLAUDE E ATKINS
15430 AVE 296
VISALIA, CA 93292

C/O GEORGE J PERRY (TR)
6343 W MINERAL KING AVE
VISALIA, CA 93291

C/O JAN SMITH
707 W ACEQUIA
VISALIA, CA 93291

C/O LOUIS WHITENDALE
15199 AVE 292
VISALIA, CA 93292

C/O PARAMOUNT CITRUS ASSOC
1901 S LEXINGTON ST
DELANO, CA 93215

C/O PCA-NE315
1901 S LEXINGTON
DELANO, CA 93215

C/O PCA-NE315
5001 CALIFORNIA AVE #230
BAKERSFIELD, CA 93309

C/O ROLL INTERNATIONAL CORP
11444 W OLYMPIC BLVD 10TH FL
LOS ANGELES, CA 90064

C/O SANDRA T ROSALES (TR)
3361 BAGLEY AVE UNIT #15
LOS ANGELES, CA 90034

CALDERON, OSMIN
30923 TOWER RD
VISALIA, CA 93291

CALVIN INC
PO BOX 5379
FRESNO, CA 93755

CARTER, TOMMY & KIM L
1142 SO RIO LINDA ST
VISALIA, CA 93292

CASTLEWOOD PARTNERS INC
P O BOX 2622
VISALIA, CA 93292

CENTEX HOMES
1840 S CENTRAL AVE
VISALIA, CA 93277

CENTRAL VALLEY RANCH
2216 HYDE AVE
VISALIA, CA 93291

CHARTER OAK CORPORATION
411 N SUTTER COURT
VISALIA, CA 93291

CLEMENTS, HAROLD & LEONA (TRS)
891 S MC AULIFF RD
VISALIA, CA 93292

CLEMENTS, PEGGY (TR)
891 S MC AULIFF
VISALIA, CA 93292

COLEY, JAMES R
30971 TOWER RD
VISALIA, CA 93292

COLUCCI, ANTONIO F & ROSE C
33150 RD 132
VISALIA, CA 93292

CONTRERAS, FELIPE DE JESUS & HERMILL
4438 E DOUGLAS CT
VISALIA, CA 93292

COOPER, CHRISTOPHER
1416 S RIO LINDA CT
VISALIA, A 93292

COTTLE, WILLIAM L
P O BOX 1012
EXETER, CA 93221

COVE RANCHES LP
2216 HYDE AVENUE
VISALIA, CA 93291

COX, PHILLIP R
1328 S RIO LINDA CT
VISALIA, CA 93277

D & J FARMS
34441 RD 176
VISALIA, CA 93292

DANIEL, ELDON
100 WILLOW PLAZA SUITE 400
VISALIA, CA 93291

DAVIS, ALICE PATRICIA
4414 E CECIL CT
VISALIA, CA 93291

DAVIS, DAN & KATHY
4411 E CECIL CT
VISALIA, CA 93291

DAVIS,LARRY & ALICE P
4414 E CECIL CT
VISALIA, CA 93292

DE JONG, ARIE & BRENDA
37455 RD 144
VISALIA, CA 93292

DE JONGE, NEIL S & CARLA G
31142 TOWER RD
VISALIA, CA 93291

DEAN, ZACHARY D
1126 S RIO LINDA ST
VISALIA, CA 93292

DEIMLER, JAMES D & JULIA
14723 AVE 344
VISALIA, CA 93291

DENNIS, BRUCE M & SHARYN D
37319 RD 192
WOODLAKE, CA 93286

DEPT OF INTERIOR - W & P R S
2800 COTTAGE WAY
SACRAMENTO, CA 95825

DIR, DALE B & BILLIE
P.O. BOX 10447
BAINBRIDGE ISLAND, WA 98110

DOUGLASS, RONALD W & BEVERLY J
(TRS)
30955 TOWER RD
VISALIA, CA 93292

DOWLING, H WILLIAM & VIRGINIA O
35599 1/2 ROAD 150
VISALIA, CA 93291

DREO, JAMES & WYONELL J
32951 RD 148
VISALIA, CA 93292

DUGGER, JAMES T & MARCIA L
14797 A AVE 296
VISALIA, CA 93292

DURHAM, CECIL & CHRISTINE
1706 S MICHAEL CT
VISALIA, CA 93292

DUVALL, DORIS
4428 E CECIL CT
VISALIA, CA 93292

ECKER, AARON & GINA
4330 E COLLEGE AVE
VISALIA, CA 93292

ECKES, GREGORY J & JEANNE
4423 E SYCAMORE CT
VISALIA, CA 93282

EGGLESTON, WILLIAM A & BOBBIE S
35599 ROAD 150 APT A
VISALIA, CA 93291

ENNIS LAND DEVELOPMENT LLC
643 N WESTWOOD ST
PORTERVILLE, CA 93257

EREDIA, JOSE B & CATHERINE M
14852 AVE 312
VISALIA, CA 93291

ERMIE, PAUL & ANDREA
31365 TOWER RD
VISALIA, CA 93292

ERNE, CHARLES A & HELEN A
14844 LIPSON AVE
VISALIA, CA 93292

ESTABROOKS, BRIAN & SHERRY
14870 AVE 360
VISALIA, CA 93291

EVANS, JUDITH L (SCSR TR)
248 E EVERGREEN
VISALIA, CA 93277

FIFE, RUBY E (TR)
34922 RD 152
VISALIA, CA 0

FLORES, JOE E
5788 LAWRENCE AVE
DINUBA, CA 93618

FORD, GLORIA
4432 E ROOSEVELT CT
VISALIA, CA 0

FOX, BYRON & KELLY
14608 AVE 328
VISALIA, CA 93291

FRY, STEVE A & SHAUNA
28868 RD 148
VISALIA, CA 93292

FULTON, WESLEY MONROE & FLORENCE
ELV
4410 E DOUGLAS AVE
VISALIA, CA 93292

FUMIA, JOHN C & CATHERINE R (TRS)
1736 LAURELWOOD DR
San Jose, CA 95125

GARCIA, ALEXANDER & TERESA
14890 AVE 296
VISALIA, CA 93292

GARCIA, VAL
4433 E ROOSEVELT CT
VISALIA, CA 93292

GARRIDO, FRANCISCO P & INEZ P
836 S RIO LINDA ST
VISALIA, CA 93292

GATEWOOD, HENRY L
4420 E GROVE CT
VISALIA, CA 93292

GOMES, RICHARD J & BETTY L (TRS)
31121 TOWER RD
VISALIA, CA 93291

GONZALES, FERNANDO & MARYHELEN
1530 S RIO LINDA ST
VISALIA, CA 93292

GOOCH, DELILA R
14850 AVE 313
VISALIA, CA 93292

GORDEN, JAMES M & MARY A
P O BOX 44066
LEMON COVE, CA 93244

GRAVES, KURT & VICTORIA L
914 SO RIO LINDA ST
VISALIA, CA 93292

GRAY, CRECENCIA (SURV TR)
30907 TOWER RD
VISALIA, CA 93292

GREEN, IRA
15440 W LONGBOW DR
SHERMAN OAKS, CA 0

GUILLEN, RAYMOND T & SANDRA
4433 E SYCAMORE CT
VISALIA, CA 93292

GUTIERREZ, CHRISTOPHER J & NICOLE D
1608 E MONTE VISTA CT
VISALIA, CA 93277

GUTIERREZ, JORGE
500 NO ARROYO ST
VISALIA, CA 93292

GUTIERREZ, MANUEL OLIVA
31175 TOWER RD
VISALIA, CA 93292

GUTIERREZ, OMAR & MARIA
1444 TAMPICO AVE
SALINAS, CA 93906

HACOBIAN, DARWIN
19839 AVENUE 364
WOODLAKE, CA 93286

HAGGARD, GERALD C & KIM B
31081 TOWER RD
VISALIA, CA 93291

HAMILTON, STEVEN D
610 N COMSTOCK CT
VISALIA, CA 93292

HANCOCK, JON & KIMBERLEY
325 NO ARROYO ST
VISALIA, CA 93291

HANSON, MATTHEW A & GRACE
4416 E ROOSEVELT CT
VISALIA, CA 93292

HARPER, STEVE L & ANNE
4432 E RACE AVE
VISALIA, CA 93292

HARRELL, WENDELL H & WILMA J
31217 TOWER RD
VISALIA, CA 93291

HART, NORMAN & BARBARA (TRS)
14167 AVE 320
VISALIA, CA 93292

HART, ROBERT EARL
33857 ROAD 160
VISALIA, CA 93292

HASH, EULA MAE
15093 AVE 280
VISALIA, CA 93292

HAURY, JAMES O & PATRICIA M (TRS)
5704 W SWEET DR
VISALIA, CA 93291

HENGST, ROBERT H & LINDA L (TRS)
37900 MILLWOOD AVE
WOODLAKE, CA 93286

HENRY, ROBERT & SHELLY
324 NO ARROYO ST
VISALIA, CA 93292

HERNANDEZ, BERTHA E
846 S RIO LINDA
VISALIA, CA 93292

HERNANDEZ, OFELIA
P O BOX 107
WOODLAKE, CA 93286

HIGBEE, RICHARD E & DOROTHY J
4422 E MC KINLEY AVE
VISALIA, CA 93292

HILL, JAMES K
4425 E GROVE CT
VISALIA, CA 93292

HILVERS, NICKOLAS J JR & TRICIA
28852 RD 1480
VISALIA, CA 93292

HORNUNG, CRAIG S
3324 S JACKIE ST
VISALIA, CA 93277

HOUSMAN, JEFF & MARILYN
14935 AVE 312
VISALIA, CA 93292

HUGHES, THOMAS B & BEVERLEY G (TRS)
31357 TOWER RD
VISALIA, CA 93291

HUNSAKER, EDWARD B & JANET M
4344 E MEADOW LANE
VISALIA, CA 93292

HUSSMAN, RICHARD L
4434 E SYCAMORE CT
VISALIA, CA 93292

HUTCHERSON, JERRY & DEBRA L
31183 TOWER RD
VISALIA, CA 93291

HUTSON, JUDY ANNE
1108 S RIO LINDA
VISALIA, CA 93292

IBARRA, JORGE
1619 SOUTH 79TH LANE
PHOENIX, AZ 85043

INGRAM, WILLIAM G & JOYCE J (TRS)
3913 COUNTRY CLUB DR
LAKEWOOD, CA 90712

IRACHETA, VICENTE & GRACIA
438 NO ARROYO ST
VISALIA, CA 93292

JEFFERS, SUSAN L
804 POMEROY RD
NIPOMO, CA 93444

JENKINS, DUSTIN & KRISTINA M
4310 E LAUREL
VISALIA, CA 93291

JERNAGAN, WAYNE & SHERRIE
4402 E ROOSEVELT CT
VISALIA, CA 93292

JIMENEZ, LOUIS & LIZA M
4437 E MCKINLEY AVE
VISALIA, CA 93292

JIMENEZ, SIMON & MARIBEL
1526 S RIO LINDA ST
VISALIA, CA 93292

JOHN & ELEANOR BENETTI CO-TRS
1509 SAN ARDO DR
San Jose, CA 95125

JOHNSON, ALAN L & TRUDY C (TRS)
19109 AVE 300
EXETER, CA 93221

JOHNSON, C PAUL & SHIRLEY E (TRS)
31618 RD 148
VISALIA, CA 93291

KHAMNEUNGTHAL, VIENGXAY
414 N ARROYO ST
VISALIA, CA 93292

KING, GERALD D & LINDA A
31273 TOWER RD
VISALIA, CA 93292

KONG, DENNY M
210 NO ARROYO ST
VISALIA, CA 93292

KOSTER, DOUGLAS E & MARSHA J
3124 STEVENSON DR
PEBBLE BEACH, CA 93953

KUECHEL, ANNETTE MARIE
37297 RD 192
WOODLAKE, CA 93286

LAMBERT, CHRIS & ERIN E
920 SO RIO LINDA ST
VISALIA, CA 93292

LANDERS, LOREEN
28908 RD 148
VISALIA, CA 93292

LANGDON, RICHARD E JR
31173 TOWER RD
VISALIA, CA 93292

LARSEN, RICHARD M & MARY ANN (TRS)
P O BOX 22127
SAN DIEGO, CA 92192

LEE, BRENDA J
1544 S RIO LINDA ST
VISALIA, CA 93292

LEE, CHER
301 NO ARROYO ST
VISALIA, CA 93292

LEE, SARN
4405 E MCKINLEY
VISALIA, CA 93292

LEWIS, JOHN W & CHRYSTAL R
31203 TOWER RD
VISALIA, CA 93292

LOCKE, ROBERT E & KARON R
31001 TOWER RD
VISALIA, CA 93291

LOPEZ, ROSENDO N & MARTHA M
30939 TOWER RD
VISALIA, CA 93292

LORENTZEN, PAUL C (TR)
2627 E PRINCETON
VISALIA, CA 93292

LOZA, FILIBERTO & ERNESTINA D
1510 S RIO LINDA ST
VISALIA, CA 93292

LUCAS, EARL E (TR)
31181 TOWER RD
VISALIA, CA 93291

LUNA, CHRISTOVAN E
4430 E OAK AVE
VISALIA, CA 93292

LY, TAM
221 NO ARROYO ST
VISALIA, CA 93292

LYNCH, MICHAEL J & PATRICIA J
4422 E DOUGLAS AVE
VISALIA, CA 93292

MANES, WALTER S & DOROTHY E
30985 TOWER RD
VISALIA, CA 93291

MARSH, RICHARD & MICHELE
4338 E COLLEGE AVE
VISALIA, CA 93292

MARTINEZ, GLORIA
31280 TOWER RD
VISALIA, CA 93292

MARTINEZ, TINA M & RAY S
1030 SO RIO LINDA ST
VISALIA, CA 93292

MC BRIDE, NANCY
826 S RIO LINDA ST
VISALIA, CA 93292

MC NALLY, INVESTMENTS A CA CORP
1805 W MAIN
VISALIA, CA 93291

MEDINA, JOSE LUIS & JUANA
1430 S RIO LINDA CT
VISALIA, CA 93292

MEDLOCK, RONNIE G & ANTONETTE
14725 AVE 296
VISALIA, CA 93292

MILLER, TIM & JERUSHA
2944 E PERSHING CT
VISALIA, CA 93292

MIRTORABI, MASOUD
20058 VENTURA BLVD #124
WOODLAND HILLS, CA 91364

MORAN, FRANCISCO
3 INGRAHAM CT
WATSONVILLE, CA 95076

NEWBERRY, ELROY R & LUPE A
36667 RD 148
VISALIA, CA 93292

NEWBERRY, RUBY I (TR)
36777 RD 148
VISALIA, CA 93292

NGUYEN, THO VAN
2424 OLD CREST PLACE
San Jose, CA 0

NIBLETT, STEPHEN R & TERESA K
4626 W WALNUT AVE
VISALIA, CA 93277

NIETO, OMAR GARCIA
100 NO ARROYO ST
VISALIA, CA 93292

NORTHAM, PATRICIA B (TR)
31161 TOWER RD
VISALIA, CA 93291

NUNES, TONY A & MARY A
4436 E MC KINLEY AVE
VISALIA, CA 93292

OAKES DITCH COMPANY
P O BOX 366
FARMERSVILLE, CA 93223

OLMOS, DOMINGO & ALICE (TRS)
1020 RIO LINDA ST
VISALIA, CA 93292

PADRON, GILBERT & ELVIA
4413 E GROVE CT
VISALIA, CA 93292

PAREGIEN, CHARLES C JR & BARBARA R (
14637 AVE 336
VISALIA, CA 93292

PAREGIEN, STEVEN D & KERI L
15080 AVE 336
VISALIA, CA 93292

PARKS, RICHARD A & JEANETTE A
31329 TOWER RD
VISALIA, CA 93291

PELTZER, BARBARA A (TR)
34286 RD 188
WOODLAKE, CA 93286

PELTZER ENTERPRISES GEN PNP
17396 AVE 344
VISALIA, CA 93292

PELTZER GROVES INC
34286 RD 188
WOODLAKE, CA 93286

PEREZ, OCTAVIO & LUCY
P O BOX 2589
WATSONVILLE, CA 95077

POLICH, THOMAS H & THERESA J (TRS)
31045 TOWER RD
VISALIA, CA 93291

POTTS, MICHAEL R
36680 MILLWOOD DR
WOODLAKE, CA 93286

PULLIN, JASON & KARRY
1136 SO RIO LINDA ST
VISALIA, CA 93292

PUTNAM, TIMOTHY & TORY D
4418 E WILDWOOD CT
VISALIA, CA 93292

RABB BROS RANCH INC
P O BOX 736
SAN JOAQUIN, CA 93660

RABB FARMS LLC
P O BOX 736
SAN JOAQUIN, CA 93660

RAMIREZ, HUGO & LYNETTE M (CO-TRS)
28687 RD 148
VISALIA, CA 93292

RAMIREZ, NICOLAS & SAN JUANA
31315 TOWER RD
VISALIA, CA 93292

REYNOSO, BENJAMIN & LORENE
36612 ROAD 148
VISALIA, CA 93291

REYNOSO, FRANK
6038 N SPALDING
FRESNO, CA 93710

REYNOSO, JOSEPH D & CONCEPCION G
36646 ROAD 148
VISALIA, CA 93291

RICO, EDDIE
123 NO ARROYO ST
VISALIA, CA 93292

RITCHIE, DOYLE & WANDA
P O BOX 3191
VISALIA, CA 93278

ROBLES, JAIME & OLGA I
4421 E DOUGLAS AVE
VISALIA, CA 93292

RODRIGUEZ, BELIA
1440 SO RIO LINDA CT
VISALIA, CA 93291

RODRIGUEZ, JAVIER JR & RHONDA
4440 E CECIL CT
VISALIA, CA 93292

RODRIGUEZ, MIGUEL A & CHRISTIE L
313 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, REFUGIO & IMELDA
111 NO ARROYO ST
VISALIA, CA 93292

RODRIGUEZ, SAUL & CHRISTINA
4439 E CECIL CT
VISALIA, CA 93292

ROSALES, JENNIFER A & JORGE A
1540 S RIO LINDA ST
VISALIA, CA 93292

ROSE, HUDSON S & ELIZABETH J
P O BOX 36
YETTEM, CA 93670

RUVALCABA, ANNETTE
4427 E RACE AVE
VISALIA, CA 93292

SABAN, GENALYN
110 NO ARROYO ST
VISALIA, CA 93292

SALDANA, MARCELLO
2505 E GOSHEN AVE
VISALIA, CA 93292

SANCHEZ, AARON
1840 SO JULIE ANN
VISALIA, CA 93277

SANCHEZ, GUILLERMO & BERTHA (TRS)
4435 E WILDWOOD CT
VISALIA, CA 93292

SANCHEZ, JIM & DARLENE
402 NO ARROYO
VISALIA, CA 93292

SANGHA, SUKHDEV S & SEWA K
1604 S RIO LINDA ST
VISALIA, CA 93292

SANTELLAN, RUBEN D & ANITA M
4404 E WILDWOOD CT
VISALIA, CA 93291

SCHNEIDER, GERALD M & NANCY L
33651 RD 148
VISALIA, CA 93291

SCHNEIDER, PATRICIA R (TR)
846 N CHINOWTH
VISALIA, CA 93291

SCOTT, DANIEL J
1100 S RIO LINDA
VISALIA, CA 93292

SELIG, MARK
222 NO ARROYO ST
VISALIA, CA 93292

SHAWL, ROBERT M
33753 RD 188
WOODLAKE, CA 93286

SHIMAJI T, TOM & JUNE
14851 AVE 360
VISALIA, CA 93292

SHOCKENCY, GLENN & VALERIE
510 NO ARROYO ST
VISALIA, CA 93292

SILVEIRA, JOE N & MARIA F (TRS)
4417 E ROOSEVELT CT
VISALIA, CA 93292

SLOVER, FRED G & BONNIE (TRS)
15302 AVE 288
VISALIA, CA 93292

SLOVER, RAY S (TR)
14840 AVE 288
VISALIA, CA 93292

SOTO, JESUS R
4411 E DOUGLAS ST
VISALIA, CA 93292

SOUTHERN CALIFORNIA EDISON COMPANY
P O BOX 800
ROSEMEAD, CA 91770

STANIC, MUROSLAV M & KATARINA
5601 W HILLSDALE
VISALIA, CA 93291

STONE CORRAL IRR DIST
37656 RD 172
VISALIA, CA 93291

STROBEN, THOMAS S & LORETTA (TR)
31191 TOWER RD
VISALIA, CA 93291

SUAREZ, IRENE
4429 E OAK AVE
VISALIA, CA 93292

TARBELL, GARY L & COLENE
37050 RD 192
WOODLAKE, CA 93286

THE MARY E MELING FAMILY LTD
PARTNERSHIP
17456 AVE 344
VISALIA, CA 93292

THORNTON, DON JR
15088 LIPSON STREET
VISALIA, CA 93292

TIMMONS, ANTHONY D
4405 E WILDWOOD CT
VISALIA, CA 93292

TORREZ, RUBEN PEREZ
300 NO ARROYO ST
VISALIA, CA 93292

TRAVIOLI FAMILY FARMS LLC
45971 DRIVE 152
OROSI, CA 93647

TRAVO, SHARON K
1500 S RIO LINDA CT
VISALIA, CA 93292

TREVINO, ISAU & LILIA
6416 AVE 400
DINUBA, CA 93618

COUNTY OF TULARE
TULARE COUNTY COURTHOUSE
VISALIA, CA 93291

TULARE IRRIGATION COMPANY
1350 W SAN JOAQUIN
TULARE, CA 93274

TURNER, DON & DEBRA A
14767 AVE 344
VISALIA, CA 93291

VALDOVINOS, SANTIAGO & VELIA
426 NO ARROYO ST
VISALIA, CA 93292

VALENCIA, ERNESTO B
P O BOX 410604
SAN FRANCISCO, CA 94141

VALER, ORITO & KRISTY
4403 E ROOSEVELT
VISALIA, CA 93292

VCPG RANCH PARTNERS LP
P O BOX 2800
VISALIA, CA 0

VINCENT, CLAYTON & DOLORES
12212 PARADISE VILLAGE; PARKWAY SOUTH
UNIT 119-C
PHOENIX, AZ 85832

VISALIA CITRUS PACKING GROUP
P O BOX 2800
VISALIA, CA 0

CITY OF VISALIA
707 W ACEQUIA
VISALIA, CA 93291

VIVEROS, NICOLAS A
207 NO ARROYO ST
VISALIA, CA 93292

WALLEN, RANDOLPH
1012 S RIO LINDA ST
VISALIA, CA 93292

WALSH, SUSAN A
926 SO RIO LINDA
VISALIA, CA 93292

WATKINS, KEITH L & SUSAN L
14852 LIPSON AVE
VISALIA, CA 93292

WEBB, JAMES W & ELAINE T
31160 TOWERS RD
VISALIA, CA 93291

WEBER, EDWARD A & SYLVIA A
28932 ROAD 148
VISALIA, CA 93292

WELCH, CRAIG A & CYNTHIA D (TRS)
4406 MC KINLEY AVE
VISALIA, CA 93292

WELLS, MATHEW S & SALLY L
4435 E GROVE CT
VISALIA, CA 93277

WERNER, SANDRA R
36996 RD 156
VISALIA, CA 93292

WHITENDALE, CARL L & BARBARA
14899 AVE 296
VISALIA, CA 93292

WHITESIDE, KENNETH & PAMELA
P O BOX 726
WOODLAKE, CA 93286

WILEY, ALFORD L & KIM
1600 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, LISA
1004 S RIO LINDA ST
VISALIA, CA 93292

WILLIAMS, RALPH R JR & MARLENE
14818 E JUDY LN
VISALIA, CA 93292

WILLIS, JOYCE E
31103 TOWER RD
VISALIA, CA 93292

WILLIS, SCOTT & LORI
31141 TOWER RD
VISALIA, CA 93292

WISE, STEVE A & LINDA E
P O BOX 2564
VISALIA, CA 93279

ZIRALDO, RANDY J
31017 TOWER ROAD
VISALIA, CA 93292

(END OF ATTACHMENT 2)

[D1007049/A0805039 Yacknin](#)



[OPR Home](#) > [CEQAnet Home](#) > [CEQAnet Query](#) > [Search Results](#) > [Document Description](#)

San Joaquin Cross Valley Loop Transmission Project

SCH Number: 2008081090

Document Type: NOD - Notice of Determination

Alternate Title: Southern California Edison's San Joaquin Cross Valley Loop 220kV Transmission Line Project San Joaquin Cross Valley Loop

Project Lead Agency: Public Utilities Commission

Project Description

Construction of an ~18.5 mile long, double circuit transmission line that would loop the existing Big Creek 3-Springville 220 kV transmission line into the Rector Substation. Installation of electrical equipment and substation supporting structures for the transmission lines, protective relays, and a mechanical and electrical equipment room (MEER) at the Rector Substation to accommodate the transmission lines.

Contact Information

Primary Contact:

Jensen Uchida
California Public Utilities Commission
(415) 703-5484
505 Van Ness Avenue
San Francisco, CA 94102-3298

Project Location

County: Tulare
City: Visalia, Farmersville
Region:
Cross Streets: Multiple
Latitude/Longitude:
Parcel No: Multiple
Township:
Range:
Section:
Base:
Other Location Info:

Determinations

This is to advise that the Lead Agency Responsible Agency California Public Utilities Commission has approved the project described above on 5/10/2010 and has made the following determinations regarding the project described above.

1. The project will will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were were not made a condition of the approval of the project.
4. A Statement of Overriding Considerations was was not adopted for this project.
5. Findings were were not made pursuant to the provisions of CEQA.

Final EIR Available at: www.cpuc.ca.gov/Environment/info/esa/sjxvl/index.html

Date Received: 8/2/2010

[CEQAnet HOME](#) | [NEW SEARCH](#)