

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.

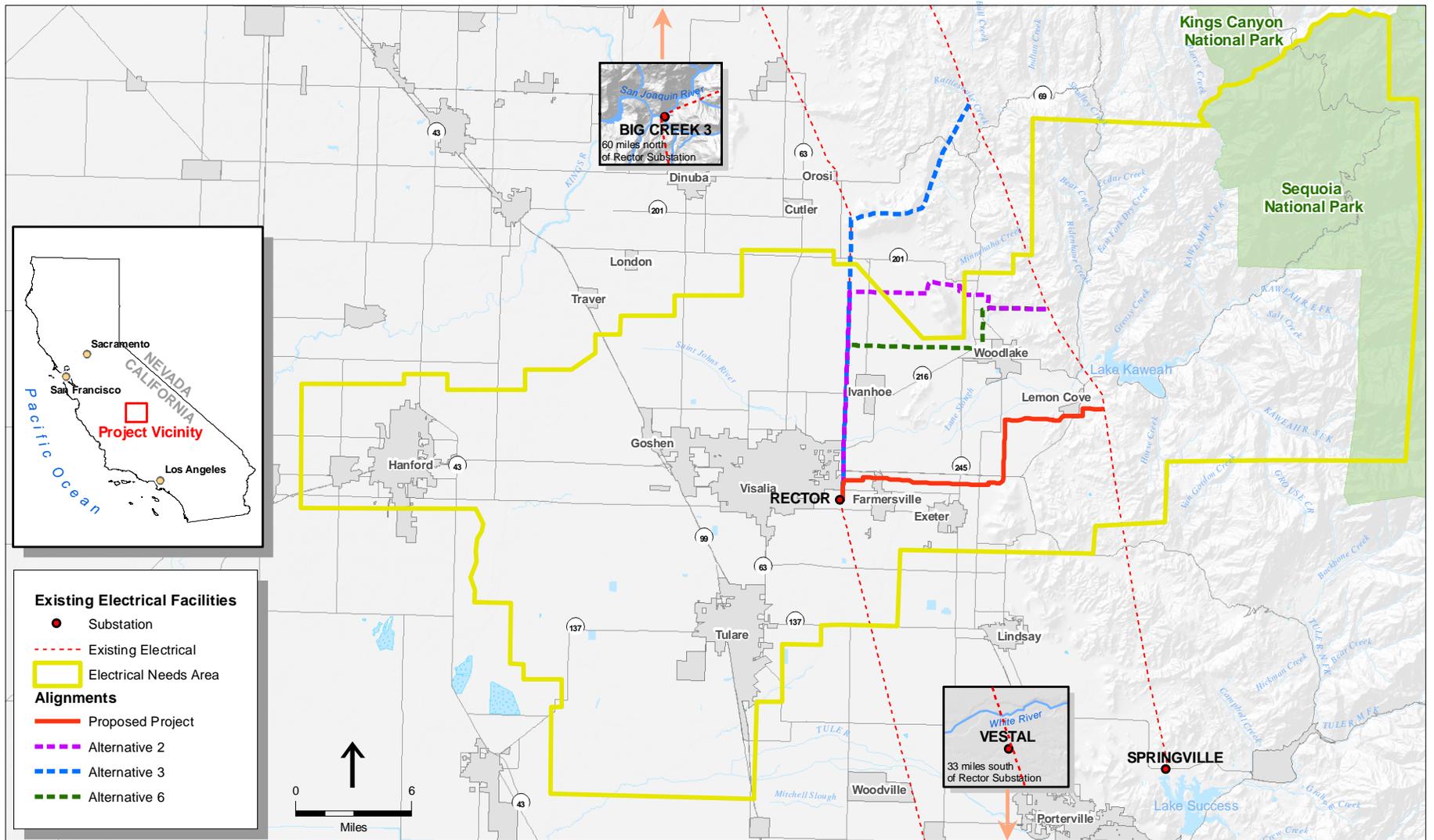
Currently four SCE owned and operated 220 kV transmission lines, commonly referred to as the Big Creek Corridor, move electricity from the Big Creek Hydroelectric Project (Big Creek) to the Electrical Needs Area which encompasses the cities of Tulare, Visalia, Hanford, Farmersville, Exeter and Woodlake, 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.



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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
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- 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.

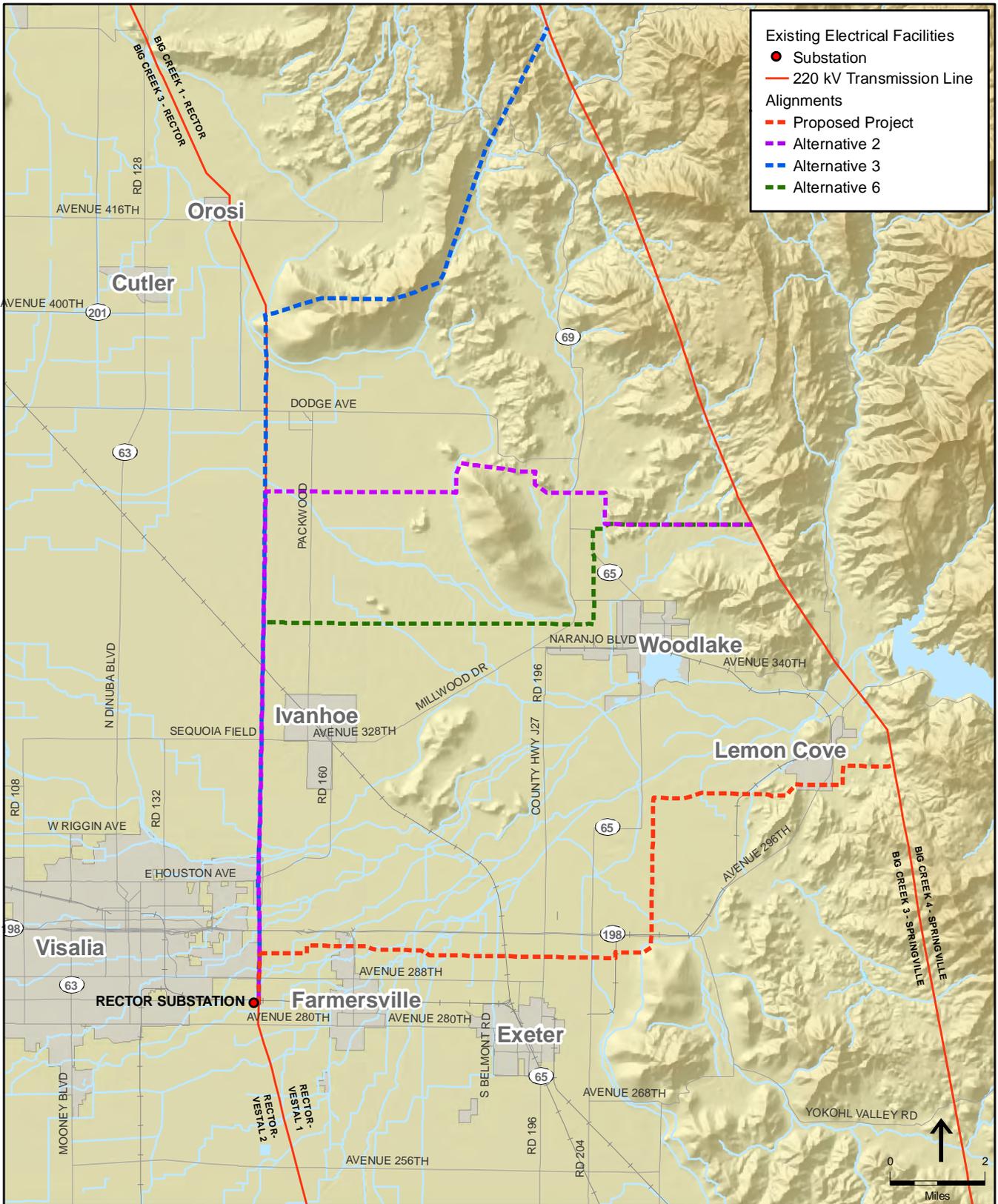
ES.2.1 Alternatives Fully Evaluated in this EIR

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

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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.				