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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 Environmentally Superior Alternative, identified as Alternative 2 in Section 5.3 of the Draft EIR. All mitigations are presented in Table H-1 provided at the end of this MMRCP.

If the Environmentally Superior Alternative 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 Environmentally Superior Alternative 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 Environmentally Superior Alternative 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
- Hazards and Hazardous Materials

- Air Quality
- Biological Resources
- Geology, Soils, Seismicity and Mineral Resources
- Hydrology and Water Quality
- Noise
- Public Services
- 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 MMRCP 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 Environmentally Superior Alternative 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 Environmentally Superior Alternative, 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 MMRCP, 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 change to the Environmentally Superior Alternative 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 MMRCP. The MMRCP 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 MMRCP 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 Environmentally Superior Alternative or adopted Mitigation Monitoring Program.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRCP 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 Environmentally Superior Alternative.

> **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 H-1
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics				
Impact 4.1-1: Alternative 2 would substantially damage scenic resources, *including*, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. *Less than significant with mitigation* (Class II)	**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 #9 and #10], SR 216 [Structures #14, #15, and #16] and SR 245 [Structures #95, #96 and #97]), 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. 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.	SCE and its contractors to implement measure as defined.	SCE to submit Structure Surface Treatment Plan to CPUC for review. CPUC mitigation monitor to inspect compliance.	Submit plan to CPUC at least 90 days prior to commencement of construction activities. During construction of new poles/towers.
	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.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	During construction of new poles/towers and installation of conductors and insulators.
Impact 4.1-2: Use of temporary staging area during the construction period could result in adverse impacts to visual quality. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.1-2:** Reduce visibility of staging areas. All staging areas including storage sites for excavated materials, and helicopter fly yards, not including construction areas around structure sites, 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 shall	SCE and its contractors to implement measure as defined.	SCE to submit final construction plans to CPUC for review. CPUC mitigation monitor to inspect compliance.	Submit plans to CPUC at least 60 days prior to commencement of construction activities. During construction of staging areas.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics (cont.)				
Impact 4.1-2 (cont.)	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.			
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. *Less than significant with mitigation* (Class II)	**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 4.1-6: If night lighting is required during construction, Alternative 2 could adversely affect nighttime views in the project area. *Less than significant with mitigation* (Class II)	**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 Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not limited to the following measures: • 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.	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Aesthetics (cont.)				
Impact 4.1-6 (cont.)	• 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: Alternative 2 could create new sources of glare. *Less than significant with mitigation* (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. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.2-1a:** SCE and/or its contractors shall ensure that the following measures are taken, during construction of Alternative 2: • 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. • 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. • 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.	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Agricultural Resources (cont.)				
Impact 4.2-1 (cont.)	• 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.	SCE and its contractors to implement measure as defined.	SCE to submit documentation of construction schedule in comparison to growing seasons to CPUC for review. CPUC mitigation monitor to monitor compliance at least once per week. SCE to submit documentation to CPUC demonstrating landowner coordination and location of replacement crops and trees.	Submit documentation to CPUC prior to commencement of construction activities. During all phases of construction activities. Within 90 days of completion of construction activities.
Impact 4.2-2: Construction activities would result in the permanent removal of designated Farmland. *Significant unmitigable* (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 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.	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Agricultural Resources (cont.)				
Impact 4.2-5: Alternative 2 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)	**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 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 documentation demonstrating compliance and landowner coordination 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.
Air Quality				
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)	**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 NOx 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.	SCE and its contractors to implement measure as defined.	SCE to submit a copy of the approved Air Impact Assessment application to CPUC.	Submit approved application to CPUC prior to commencement of construction activities.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-1 (cont.)	**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.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week. SCE shall submit documentation to the CPUC exhibiting coordination with the Tulare County Farm Bureau.	During all phases of construction activities.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-1 (cont.)	• 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. 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.			
Impact 4.3-3: Alternative 2 could result in permanently disturbed land that would serve as a source of fugitive dust emissions. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.3-3:** After construction, SCE shall, during operation of the project, utilize the following control measures to reduce fugitive PM10 and PM2.5 emissions from operations and maintenance clearance areas around poles and towers, and from and new access and spur roads: • Apply and maintain water to all un-vegetated areas; or • Establish landowner-approved vegetation that is compliant with SCE line clearance requirements; or • Apply and maintain landowner-approved surface treatments (e.g., gravel or crushed stone).	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance annually.	Following the completion of construction.
Impact 4.3-4: Construction emissions associated with Alternative 2 could result in emissions of ozone precursors that would be cumulatively considerable. *Less than significant with mitigation* (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 Alternative 2 could result in emissions of particulate matter that would be cumulatively considerable. *Less than significant with mitigation* (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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
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)	**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: Alternative 2 would generate short-term and long-term emissions of GHGs. *Less than significant with mitigation* (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 Warming Solution Act of 2006 (AB 32), to offset a minimum of 30 percent of the net annualized increase of greenhouse gas emissions from Alternative 2 for year six 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 CO_2e per year (i.e., 30 percent of 57.1 metric tons CO_2e). 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 Alternative 2, 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.	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.
	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:	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Air Quality (cont.)				
Impact 4.3-8 (cont.)	• 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 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 selection of 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.)	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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
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-sepaled button celery. *Less than significant with mitigation* (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.
	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	SCE and its contractors to implement measure as defined.	SCE to submit documentation demonstrating agency consultation and outlining avoidance, minimization, and compensation measures 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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-1 (cont.)	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.			
	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.	SCE and its contractors to implement measure as defined.	SCE to submit Noxious Weed and Invasive Plant Control Plan to CPUC and Tulare County Agricultural Commissioner/ Sealer for review. CPUC mitigation monitor to monitor compliance.	Submit plan to CPUC and Tulare County prior to commencement of construction activities. During all phases of construction activities.
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)	**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.	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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-2 (cont.)	**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.			
	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.	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 avoidance and minimization is not feasible. 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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
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)	**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.	SCE and its contractors to implement measure as defined.	SCE to submit survey results to the CPUC CPUC mitigation monitor to monitor compliance at least once per week.	Submit results to CPUC within one week of completion of surveys. During all phases of construction activities and during maintenance activities that occur during golden eagle nesting periods.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-3 (cont.)	• 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 though 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.			

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-3 (cont.)	**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).	SCE and its contractors to implement measure as defined.	SCE to submit documentation of acquired/restored Swainson's Hawk foraging habitat to CPUC for review.	Submit documentation to CPUC prior to commencement of construction activities.
Impact 4.4-4: Construction activities may impact protected nesting migratory birds. *Less than significant with mitigation* (Class II)	**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.	SCE and its contractors to implement measure as defined.	SCE to submit resume of qualified wildlife biologist and survey results to CPUC for review. CPUC mitigation monitor to monitor compliance with buffer requirements if nests are identified.	Submit documentation to CPUC prior to commencement of construction activities. During all construction activities that coincide with breeding season.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-5: Construction activities could result in direct and indirect impacts on burrowing owl. *Less than significant with mitigation* (Class II)	**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.	SCE and its contractors to implement measure as defined.	SCE to submit resume of qualified wildlife biologist and survey results 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 construction activities.
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)	**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	SCE and its contractors to implement measure as defined.	SCE to submit resume of qualified wildlife biologist and survey results to CPUC. CPUC mitigation monitor to monitor compliance at least once per week.	Submit documentation to CPUC prior to commencement of construction activities. During all construction activities.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-6 (cont.)	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.			

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-6 (cont.)	• 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. *Less than significant with mitigation* (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: • 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; • In areas with high avian collision risk, shield wires to minimize the effects from bird collisions consistent with APLIC guidelines.	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.
Impact 4.4-8: Construction activities would impact riparian habitat, including native oak trees. *Less than significant with mitigation* (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. *Less than significant with mitigation* (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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-9 (cont.)	**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. 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. • 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.	SCE and its contractors to implement measure as defined.	SCE to submit documentation of wetland offsets to CPUC. SCE to submit wetland mitigation and monitoring plan and resume of plan preparer to CPUC and applicable regulatory agencies.	Submit documentation to CPUC prior to commencement of construction activities. Submit plan to CPUC and applicable regulatory agencies prior to commencement of construction activities.
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)	**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;	SCE and its contractors to implement measure as defined.	SCE to submit plan establishing Best Management Practices for avoiding impacts to landmark trees to CPUC. CPUC mitigation monitor to monitor compliance at least once per week.	Submit documentation to CPUC prior to commencement of construction activities. During construction activities occurring within the City of Visalia.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-10 (cont.)	• 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 consistent with the City of Visalia Oak Tree Mitigation Policy (Visalia Municipal Code sections 12.24.037 and 12.24.110); • Mitigate for soil compaction and tree injuries, including dust control.			
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)	**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	SCE, its contractors, and USFWS-approved construction monitor to implement measure as defined.	SCE to submit biological evaluation, copies of habitat mitigation plan, wetland mitigation and monitoring plan and resume of plan preparer to CPUC and applicable regulatory agencies. USFWS-approved construction monitor to monitor compliance.	Submit plans to CPUC and applicable regulatory agencies prior to commencement of construction activities. During construction within 500 feet of vernal pool habitat

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.4-ALT2-1 (cont.)	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.			

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Biological Resources (cont.)				
Impact 4.1-ALT2-1 (cont.)	• 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.			
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)	**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.	SCE and its contractors to implement measure as defined.	SCE to submit resume of qualified ecologist and restoration and mitigation plan 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 construction activities.
Cultural Resources				
Impact 4.5-1: Implementation of Alternative 2 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)	**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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-5: Implementation of Alternative 2 could adversely affect paleontological resources. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.5-5:** SCE and/or its contractors shall conduct a paleontological assessment of Alternative 2 area prior to construction of Alternative 2. 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 Alternative 2 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 Alternative 2 could result in the disturbance of human remains. *Less than significant with mitigation* (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 descendents 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.
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)	**Mitigation Measure 4.5-ALT2-1a:** 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 Alternative 2. The HPTP shall document all historic properties within the ROW of Alternative 2 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	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-ALT2-1 (cont.)	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-ALT2-1b: 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 Alternative 2; 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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
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)	**Mitigation Measure 4.5-ALT2-2a:** 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.	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.
	Mitigation Measure 4.5-ALT2-2b: 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. 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	SCE and its contractors to implement measure as defined.	SCE to suspend all work and contact CPUC if archaeological resources are discovered. If resource is significant, submit site Treatment Plan and records of consultation with Native American representatives to CPUC. CPUC mitigation monitor to monitor compliance at least once per week.	During all phases of construction activities. Within 5 business days of determining a find significant. During all phases of construction activities.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Cultural Resources (cont.)				
Impact 4.5-ALT2-2 (cont.)	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.			
Geology, Soils, Seismicity, and Mineral Resources				
Impact 4.6-5: Alternative 2 could result in substantial soil erosion or the loss of topsoil. *Less than significant with mitigation* (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.
Hazards and 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)	**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.	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 4.7-1b: 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	SCE and its contractors to implement measure as defined.	SCE to submit Hazardous Substance Control and Emergency Response 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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-1 (cont.)	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.	SCE and its contractors to implement measure as defined.	SCE to submit Health and Safety 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.
	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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-2: Blasting activities could pose a hazard to the public. *Less than significant with mitigation* (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: • 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.	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 H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-2 (cont.)	• 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. *Less than significant with mitigation* (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 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.	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.
	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 Alternative 2. 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.	SCE and its contractors to implement measure as defined.	SCE to submit Soil Sampling and Analysis Plan to CPUC for review and approval. SCE to submit results of soil sampling and recommended resolutions to CPUC. CPUC mitigation monitor to monitor compliance.	Submit plan to CPUC for review at least 60 days prior to commencement of construction activities. Submit results of soil sampling and recommended resolutions to CPUC for review prior to commencement of construction activities. During excavation and treatment/disposal of contaminated soil/material.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
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)	**Mitigation Measure 4.7-5:** Implement Mitigation Measure 4.7-3a.	See Mitigation Measure 4.7-3a.	See Mitigation Measure 4.7-3a.	See Mitigation Measure 4.7-3a.
Impact 4.7-6: Alternative 2 could create a safety hazard to aerial spray applicators. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.7-6:** SCE shall 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 either 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.	SCE and its contractors to implement measure as defined.	SCE to submit documentation to CPUC demonstrating that all aerial applicators and helicopter pilots that offer frost protection have been notified.	Prior to commencement of construction activities.
Impact 4.7-7: Construction of Alternative 2 could interfere with an emergency response or evacuation plan. *Less than significant with mitigation* (Class II)	**Mitigation Measure 4.7-7:** Implement Mitigation Measures 4.14-1b and 4.12-2.	See Mitigation Measures 4.14b and 4.12-2.	See Mitigation Measures 4.14b and 4.12-2.	See Mitigation Measures 4.14b and 4.12-2.
Impact 4.7-8: Construction activities could ignite dry vegetation and start a fire. *Less than significant with mitigation* (Class II)	**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	SCE and its contractors to implement measure as defined.	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.	Submit verification to CPUC prior to commencement of construction activities. During all phases of construction.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-8 (cont.)	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.			
Impact 4.7-11: Induced currents associated with operation of Alternative 2 could generate electrical shocks. *Less than significant with mitigation* (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 that have the potential for induced voltages 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 (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.	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 a report prepared by a California-registered hydrogeologist to CPUC summarizing all water quantity and quality testing. The report shall be made publicly available. SCE to submit documentation to CPUC demonstrating that all affected wells were successfully relocated.	Submit documentation prior to commencement of construction activities. Submit report prior to well relocation. Submit documentation prior to electrifying new transmission line.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-11 (cont.)	***Other Groundwater Wells.*** Using the working clearances identified in Cal OSHA Title 8 of the California Code Section 2946, and considering the minimum height of equipment (e.g., boom trucks) 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 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. For those wells where adequate vertical clearance is not feasible (either technically or economically), SCE shall engage a 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			

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hazards and Hazardous Materials (cont.)				
Impact 4.7-11 (cont.)	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 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.			
Hydrology and Water Quality				
Impact 4.8-1: Construction and maintenance of Alternative 2 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)	**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).	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to inspect compliance.	During construction of new permanent access roads.
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)	**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 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.	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 that involve excavation.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Hydrology and Water Quality (cont.)				
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)	**Mitigation Measure 4.8-3:** Implement Mitigation Measure 4.8-1, described above.	See Mitigation Measure 4.8-1.	See Mitigation Measure 4.8-1.	See Mitigation Measure 4.8-1.
Land Use, Planning, and Policies				
No mitigation required.				
Noise				
Impact 4.10-1: Blasting activities could expose people and/or structures to substantial vibration levels. *Less than significant with mitigation* (Class II)	**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. 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 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. • 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	SCE and its contractors to implement measure as defined.	SCE to submit Blasting Plan to CPUC for review and approval. CPUC mitigation monitor to monitor compliance. SCE to submit reports documenting damage, excessive vibrations, etc. to the CPUC and impacted property owners.	Submit plan to CPUC prior to commencement of construction activities. During all construction activities that include blasting. Within 24 hours of any blasting activity associated with construction of the project.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-1 (cont.)	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. • If the vibration and settlement criteria of 0.5 in/s PPV 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. • 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.			

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-4: Construction equipment would generate noise levels that would adversely affect nearby sensitive receptors. *Less than significant with mitigation* (Class II)	**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.	SCE and its contractors to implement measure as defined.	CPUC mitigation monitor to monitor compliance at least once per week and inspect equipment periodically. SCE to submit documentation of noise complaints and resolutions to CPUC on a weekly basis.	During all phases of construction. During all phases of construction.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-4 (cont.)	• 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.			
	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.	SCE and its contractors to implement measure as defined.	SCE to submit nighttime noise reduction plan to CPUC for review and approval. CPUC mitigation monitor to monitor compliance.	Submit plan to CPUC prior to commencing any nighttime construction activities. During all phases of construction that include nighttime construction activities.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Noise (cont.)				
Impact 4.10-5: Blasting activities could expose people to substantial noise levels. *Less than significant with mitigation* (Class II)	**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.	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. *Less than significant with mitigation* (Class II)	**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 Alternative 2. Additionally, the Plan shall be distributed to all construction crew members involved in the project prior to construction and operation of the project.	SCE and its contractors to implement measure as defined.	See Mitigation Measure 4.7-1c.	See Mitigation Measure 4.7-1c.
	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. *Less than significant with mitigation* (Class II)	**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.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Public Services (cont.)				
Impact 4.12-3: Project construction activities could temporarily increase the demand for police services. *Less than significant with mitigation* (Class II)	**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. *Less than significant with mitigation* (Class II)	**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.
	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: • Include a discussion of work hours, haul routes, work area delineation, traffic control and flagging;	SCE and its contractors to implement measure as defined.	SCE to submit Traffic Management Plan and documentation showing agency approval to CPUC. CPUC mitigation monitor to monitor compliance.	Prior to commencement of construction activities. During all phases of construction.

TABLE H-1 (continued)
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE SAN JOAQUIN CROSS VALLEY LOOP TRANSMISSION PROJECT ENVIRONMENTALLY SUPERIOR ALTERNATIVE (ALTERNATIVE 2)

Environmental Impact	Mitigation Measures Proposed in this EIR	Implementing Actions	Monitoring/Reporting Requirements	Timing
Transportation and Traffic (cont.)				
Impact 4.14-1 (cont.)	• 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.			
	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.	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. *Less than significant with mitigation* (Class II)	**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. *Less than significant with mitigation (Class II)*	**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.

(END OF ATTACHMENT 1)