

## B.3 Environmental Analysis and Mitigation

### B.3.1 Aesthetics

AESTHETICS				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.1.1 Setting

##### ***Visual Inventory Methodology***

A visual setting is described in terms of the existing *landscape character and visual quality* of the viewshed. Existing landscape character is an overall visual and cultural impression of landscape attributes — the physical appearance and cultural context of a landscape that gives it an identity and sense of place. Existing landscape character is determined by landforms, vegetation patterns, waterbodies, and cultural features. Visual quality is a judgment as to a landscape’s attractiveness, as determined by attributes broadly recognized as being valued and preferred by most viewers. Visual quality is expressed as a range of valued landscape attributes, often described in terms such as form, line, color, and texture. Combinations of these factors lead to evaluations of landscape character and visual quality, such as:

- High – a landscape of exceptional quality and beauty, valued for its scenic attributes.
- Moderate – a landscape that is common or average within the landscape character type.
- Low – a landscape that appears dull or monotonous, or is lacking in scenic features.

The existing landscape setting and its viewers are characterized in terms of their overall *visual sensitivity*. The components of visual sensitivity are:

- anticipated level of *viewer concern or sensitivity*, based primarily on scenic expectations associated with viewer activities as well as the number of viewers; and
- overall *viewer exposure* to the Project, including considerations of existing visual screening, viewing duration, viewing distance, angle of view, etc.

Evaluations of existing landscape character and visual quality, combined with ratings of overall visual sensitivity, which may then be moderated by limitations in viewer exposure, establishes the visual inventory methodology.

Key observation points (KOPs) generally are identified to represent the most critical viewing locations and the viewer groups likely to be affected by a project. Assessments of impact are determined from these KOPs. In the impact analysis, overall visual sensitivity is considered in combination with the level of visual

change introduced by a project, as seen from a KOP, to arrive at preliminary findings of potential project impact significance. In this analysis impacts to foreseeable future viewers, such as residents of new and currently un-built subdivisions, are also analyzed to support the evaluation of cumulative impacts.

### *Existing Landscape Setting and Viewer Characteristics*

**Regional Context.** The project site is situated on a flat topographic plain on the northern edge of the City of Visalia. Visalia is located in the southern San Joaquin Valley, and is part of California's Great Valley Landscape Province (USDA Forest Service, 1973).

The Proposed Project site is approximately 2.5 miles northwest of downtown Visalia, and less than one mile south of the Saint Johns River. The Saint Johns River trends from east-southeast to west-northwest, and the river is commonly dry. Approximately 0.1 miles south of the site, Wutchumna Ditch drains residential neighborhoods and trends in a similar east-southeast to west-northwest direction, the general tilt of the plain.

The project area represents the current edge of existing suburban development of the City of Visalia, which is one of the most rapidly developing cities in the San Joaquin Valley (see Section B.3.12, Population and Housing, of this MND). As an example of this rapid growth and its implications for visual resource management, groves of English walnut trees that are displayed on adjacent parcels in aerial photographs in the PEA (dated June 1, 2006) have already been removed, largely changing the existing landscape character from rural/agricultural groves to new and yet-to-be-developed subdivisions of single family residences (see Figure B.1-1).

The larger site setting including most of the City of Visalia north of Highway 198 is a landscape created on a large, flat plain that drains to the Saint Johns River to the north, and is tilted slightly to the west, toward the San Joaquin River. The immediate project visual setting can be characterized as two distinct landscape units divided by Riggin Avenue. North of Riggin Avenue, the existing landscape character is typified by large tracts of walnut groves on an extremely flat landform. The walnut trees create vegetative screening that blocks all but foreground views. South of Riggin Avenue and southeast of the Project site, the existing landscape character is typified by existing single-family residential neighborhoods. Southwest of the intersection of Riggin Avenue and Mooney Boulevard (southwest of the Project site), the existing landscape character has recently undergone a dramatic change from walnut groves to newly graded lots for a new residential development. North of Riggin Avenue, Mooney Boulevard is currently being extended and is planned to become another local street leading to approved single-family residential developments west and north of the project site.

There are no notable visual features in this viewshed. There are no views to the Saint Johns River from the project site, Riggin Avenue, or Mooney Boulevard due to the flat topography and intervening walnut trees or structures.

**Project Viewshed and Key Observation Points.** The study area for the aesthetics analysis was defined through on-site reconnaissance, including a tour and on-site investigation of the proposed substation site and subtransmission line route in February 2007 (Aspen, 2007). The project site was investigated from numerous viewpoints from which sensitive receptors could see the site, including local streets, future planned streets, nearby residential areas, parks, and schools. To the west, potential viewsheds are extensive across large expanses of flat terrain, currently barren agricultural fields, and newly graded land where groves of walnut trees have been removed recently. However, considering the relatively small size of the site (approximately two acres) and the visual screening created by existing residential neighborhoods to the south, existing walnut groves east of the site, and future visual screening that will be

provided by rapidly developing new residential subdivisions to the southwest, west, north, and east of the practical viewshed boundary for this analysis will be much smaller.

The viewshed is currently limited on the south by the existing North Park Homes residential development and on the east by an existing walnut grove. From the west and southwest, newly graded land is currently bare, but new streets and residential lots have been prepared and are in the process of development. These new developments will create new foreground screening, so the site will become less visible or totally screened from distant views.

Potential sensitive receptors within a one-half mile viewshed, where unobstructed, include existing single-family residential neighborhoods and travelers along Riggin Avenue and Mooney Boulevard. Other potential sensitive receptors will, in the future, include motorists traveling on future nearby roadways, such as the extension of Mooney Boulevard and the future Ranch Circle Drive, which will provide access to the substation. Views from other roadways, nearby parks, and schools are either too distant to be affected by the Proposed Project, or are obstructed by intervening structures or existing walnut groves.

*Project Site.* Figure B.3-1 displays the existing view of the setting as seen from the extension of Mooney Boulevard looking east from the approximate intersection of the future Ranch Circle Drive, north of Riggin Avenue. The site is on flat terrain with no topographic relief, and existing walnut trees provide excellent vegetative screening. However, existing walnut groves are expected to be removed, and views will become extended to the middleground. Figure B.3-2 was taken from the same location as Figure B.3-1, above, but looks west instead of east. This photograph displays the landscape after walnut trees have been removed, with the landscape freshly graded for future streets and residential lots. These longer vistas will be constricted with new residential structures, which again will provide screening and constrain views to immediate foreground distances.

The existing 66 kV subtransmission line is located along the north side of Riggin Avenue in the distance of Figure B.3-2 and in the foreground of Figure B.3-3. Figures B.3-3 and B.3-4 display existing views of the project area from Riggin Avenue.

*Key Observation Points (KOPs).* Two Key Observation Points (KOPs) are identified below, representing potentially sensitive receptor locations and key viewer groups: (1) existing travelers looking northwest from Riggin Avenue, presently the nearest public street; and (2) existing travelers and future residential viewers looking northeast from Riggin Avenue near the extension of Mooney Boulevard.

*KOP 1: Travelers Along Riggin Avenue.* KOP 1 was established on Riggin Avenue, looking northwest across the street to the C. R. Shannon (CRS) Ranch office complex, which includes offices in the building to the east, an open parking area, and open-machinery sheds and storage buildings to the west. The proposed substation would be located beyond the parking area in the area currently occupied by a walnut grove, approximately 250 feet from the street, making this a foreground viewing distance to the proposed substation. The location of KOP 1 is shown on Figure B.3-5.

This view is representative of motorists' views from westbound traffic on Riggin Avenue, and from pedestrians on the sidewalk on the south side of the street. The sidewalk is bordered on both sides by a grass strip and landscape trees which partially screen the view. South of Riggin Avenue, approximately a dozen residences in the established North Park Homes neighborhood have back yards adjoining the street, but an existing 5½-foot-high concrete block wall screens views to the Proposed Project site. From these back yards and from both directions on Riggin Avenue, the existing overhead Rector–Oak Grove No. 1 66 kV subtransmission line is visible on wood poles approximately 65 feet tall, and the proposed subtransmis-

sion line would originate at a new 85-foot tall tubular steel pole (TSP) riser in alignment with the existing wood poles.

Figure B.3-6A shows the typical view from KOP 1 as analyzed by SCE in 2006. The new low-profile substation would be partially screened by existing buildings at the Shannon Ranch office complex and by the new concrete block screen wall around the substation.

**Visual Quality: low.** The primary focal points of this landscape are the machinery buildings on the left, white storage tank in the middle, and office buildings on the right of this view. A secondary focal point is created by landscaping around the paved parking lot, and a third focal point is created at the foreground skyline by tops of walnut trees in the commercial walnut grove beyond the parking lot. The ground plain of the proposed substation site is flat and screened from view of KOP 1 by the hedge at the back of the parking lot.

**Viewer Concern: low-to-moderate for the substation, low for the subtransmission line.** Residents in this part of Visalia experience a mix of existing residential neighborhoods, rural/agricultural walnut groves, and newly developing residential subdivisions. Area residents can be expected to have low-to-moderate concern for visual impacts from the substation, and low concern for the subtransmission line because they are subject to views of these types of landscape alterations on a daily basis.

**Viewer Exposure: moderate for the substation, high for the TSP riser, low for the underground subtransmission line.** Because there is no screening by landforms, the proposed substation could be highly visible in the foreground from KOP 1. The machinery buildings, storage tank, and existing landscaping hedge partially screen the proposed substation site from view, but the proposed substation would be immediately adjacent and between these existing forms, leading to moderate viewer exposure. Viewer exposure to the existing overhead subtransmission line is high and would be high for the proposed TSP riser because nothing screens views of this line. Viewer exposure for the new underground subtransmission line would be low, because it would be underground and out of sight. The number of viewers on Riggin Avenue would be moderate. For all of these viewers, the duration of view would be brief because of the speed of travel, generally 25 miles per hour.

**Overall Visual Sensitivity: low-to-moderate for the substation, moderate for the subtransmission line.** For motorists traveling on Riggin Avenue and pedestrians walking on the sidewalk along Riggin Avenue, and from KOP 1 specifically, the low visual quality, low-to-moderate viewer concern, and moderate viewer exposure lead to a low-to-moderate overall visual sensitivity of the visual setting and viewing characteristics of the proposed substation. For the subtransmission line, the low visual quality, low viewer concern, and high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

*KOP 2: Travelers and Future Residential Viewers Near Mooney Boulevard South of the Site.* KOP 2 was established on Riggin Avenue just west of Mooney Boulevard, looking east-northeast across the intersection toward agricultural buildings at the C. R. Shannon Ranch complex. This viewpoint is representative of eastbound motorists' and pedestrians' views on Riggin Avenue and from the new residential subdivision at the southwest corner of Riggin Avenue and Mooney Boulevard. Figure B.3-7A shows the view from KOP 2 in a photo taken during February 2007, and may not be indicative of the existing visual conditions, due to the rapidly changing landscape character in this area.

**Visual Quality: low.** The primary focal points of this landscape are the machinery building in the foreground and the temporary orange fencing at the extension of North Mooney Boulevard. Secondary focal points are created by the foreground skyline tops of walnut trees in the commercial walnut grove and the

Figure B.3-1. Looking East from North Mooney Boulevard Extension toward Substation Site

Figure B.3-2. Looking West from North Mooney Boulevard Extension away from Substation Site

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Figure B.3-3. Looking East on Riggan Avenue from North Mooney Boulevard Intersection

Figure B.3-4. Looking Northwest from Riggan Avenue toward Substation Site

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Figure B.3-5. Location of Key Observation Point 1, Looking Northwest from Riggin Avenue  
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Figure B.3-6A. KOP 1: Looking Northwest from Riggin Avenue toward Substation Site

Figure B.3-6B. Simulation of New Substation Looking Northwest from Riggin Avenue

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Figure B.3-7A. KOP 2: Looking Northeast from Riggins Avenue toward Substation Site

Figure B.3-7B. Simulation of New TSP Riser and Substation Looking Northeast from Riggins Avenue

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overhead subtransmission line with a line of wooden poles approximately 65 feet tall along the north side of Riggan Avenue. The ground plain of the proposed substation site is flat and partially screened from view of KOP 2 by the temporary orange fencing and piles of cut firewood near the machinery building.

**Viewer Concern: low-to-moderate for the substation, low for the subtransmission line.** Similar to KOP 1, residents in this part of Visalia experience a mix of existing residential neighborhoods, rural/agricultural walnut groves, and newly developing residential subdivisions. Area residents can be expected to have low-to-moderate concern for visual impacts from the substation, and low concern for the overhead subtransmission line because they are subject to views of these types of landscape alterations on a daily basis.

**Viewer Exposure: moderate for the substation, high for the TSP riser, low for the underground subtransmission line.** Because there is no screening by landforms, the proposed substation could be highly visible from KOP 2. However, the existing machinery building would somewhat screen the site, leading to moderate viewer exposure. There are also plans for commercial development at the northeast corner of this intersection, which could in the future completely screen the substation from this view. As land development continues on the southwest, west, north, and east sides of the Proposed Project, additional viewer exposure will likely occur. Development of 112 residential home sites is planned north of the future Ranch Circle Drive. However, it is not possible to evaluate such potential views because the land is currently undeveloped, and development plans may change during construction. Viewer exposure to the existing overhead subtransmission line is high, and would be high for the proposed TSP riser, because there is no screening for this overhead line. Viewer exposure for the new underground subtransmission line would be low, because it would be underground and out of sight. The number of viewers on Riggan Avenue and North Mooney Boulevard would be moderate. For all of these viewers, the duration of view would be brief because of the speed of travel, generally 25 miles per hour, and the attention drawn to traffic at the intersection.

**Overall Visual Sensitivity: low-to-moderate for the substation, moderate for the subtransmission line.** For motorists at the intersection of Riggan Avenue and North Mooney Boulevard, and pedestrians walking on the sidewalks at this intersection, and from viewers at KOP 2 specifically, the low visual quality, low-to-moderate viewer concern, and moderate viewer exposure lead to a low-to-moderate overall visual sensitivity of the visual setting and viewing characteristics of the proposed substation. For the subtransmission line, the low visual quality, low viewer concern, and high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

#### ***Applicable Regulations, Plans, and Standards***

No applicable federal aesthetic or visual standards would affect this project, and there are no designated or eligible State scenic highways located within the project viewshed.

**City of Visalia General Plan.** The City of Visalia General Plan contains goals and policies relating to the protection and enhancement of visual resources in the Project Area. The City of Visalia General Plan was prepared in 1991 and adopted by the Visalia City Council on September 3, 1991 under Resolution No. 91-106. An Environmental Impact Report (EIR) was prepared for the General Plan. The Land Use Element of the General Plan has been updated as recently as 2005 (City of Visalia, 2006). While they do not specifically address potential visual impacts of electrical utility facilities, both documents contain some references to scenic resource matters. Goal 1 of the Land Use Element of the City of Visalia General Plan is to “preserve and enhance the City of Visalia’s unique character.” Objective A under Goal

1.1, Community Identity, is to “Maintain and enhance the City of Visalia’s physical diversity, visual qualities and small-town characteristics.”

Goal 1 of the Land Use Element of the General Plan includes the following implementing policies (City of Visalia, 1996):

- Encourage development site design to incorporate site amenities that emulate the historical use of the property or surrounding natural features (i.e., retaining walnut groves as landscape buffers, or in parking lots) through special site design and landscaping.
- Encourage the incorporation of existing on-site trees in street and landscaping designs where appropriate to preserve the City of Visalia’s diminishing agricultural/rural character.

### **B.3.1.2 Environmental Impacts and Mitigation Measures**

#### ***Visual Impact Assessment Methodology***

This visual analysis used the Visual Sensitivity/Visual Change (VS/VC) methodology to assess the visual effects of the Proposed Project on existing landscapes. The VS/VC methodology includes a characterization of the visual sensitivity of existing landscapes, the characteristics of existing visual changes occurring and apparent in the landscape, and the characteristics of the Proposed Project.

Following professionally accepted practice in visual analysis, visual sensitivity consists of three components: visual quality, viewer concern, and viewer exposure. The description of visual quality notes the existing built structures and natural landscape features that contribute to overall visual quality. Viewer concern can be described as the personal expectations for the landscape that are held by the viewing public. Viewer concern is often reflected in public policy documents that identify landscapes of special concern or roadways with special scenic status, e.g., scenic highways. Viewer exposure also affects a landscape’s overall visual sensitivity. Landscapes that have very low viewer exposure, based on landscape visibility, viewing distance, number of people who view the landscape, or duration of time that the landscape can be viewed, will tend to be less sensitive to overall visual change in the context of human experience of visual impacts. Landscapes with higher viewer exposure are more sensitive to overall visual changes.

Project-induced visual change could result from aboveground facilities, vegetation removal, landform modification, component size or scale relative to existing landscape characteristics, and the placement of project components relative to developed features. The experience of visual change can also be affected by the degree of available screening by vegetation, landforms, and/or structures; distance from the observers; atmospheric conditions; and angle of view. Visual change describes the degree of actual visible change expected as a result of the project. The fundamental elements of visual change include visual contrast, visual dominance, and scenic view obstruction. Visual contrast refers to formal contrast of form, line, color or texture of the project against the existing landscape. Visual dominance refers to the degree to which this contrast would demand the attention of casual viewers and reflects various considerations including contrast, spatial and orientation factors, and visual magnitude. Scenic view obstruction refers to the degree to which the project would block or intrude upon scenic view corridors, particularly those identified in public policies. Overall visual change is rated on a scale of Low to High.

In addition, the project is evaluated for conformance with applicable local plans and policies. Adopted expressions of local public policy pertaining to visual resources are given great weight in determining both visual quality and viewer concern.



In the following analysis, impacts from Key Observation Points were evaluated based in part on simulations of the proposed substation design as seen from Riggin Avenue and a preliminary alternative substation site location, both of which were prepared by SCE in 2006.

Using these simulations and the VS/VC methodology, determinations were made of potential visual impacts by evaluating the extent of visual change in the context of the existing visual sensitivity and existing trends in the landscape.

The determination of which aesthetic changes cross a threshold of “substantial adverse effect” or degradation is based upon the criteria described in the methodology summary (above) and in Table B.3.1-1, Visual Impact Significance Criteria. This table was used primarily as a consistency check, as determinations of visual sensitivity and visual change were based primarily on analyst experience and site-specific circumstances.

Implicit in this rating methodology is the acknowledgment that for a visual impact to be considered significant two conditions generally exist: (1) the existing landscape is of reasonably high quality and is relatively valued by viewers; and (2) the perceived incompatibility of one or more elements or characteristics of the project tends toward the high extreme, leading to a substantial reduction in visual quality.

**Table B.3.1-1. Visual Impact Significance Criteria**

Visual Sensitivity	Visual Change				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	No impact <sup>1</sup>	No impact	Less Than Significant <sup>2</sup>	Less Than Significant	Less Than Significant
Low to Moderate	No impact	Less Than Significant	Less Than Significant	Less Than Significant	Less Than Significant with Mitigation Incorporated <sup>3</sup>
Moderate	Less Than Significant	Less Than Significant	Less Than Significant	Less Than Significant with Mitigation Incorporated	Less Than Significant with Mitigation Incorporated
Moderate to High	Less Than Significant	Less Than Significant	Less Than Significant with Mitigation Incorporated	Less Than Significant with Mitigation Incorporated	Potentially Significant Impact <sup>4</sup>
High	Less Than Significant	Less Than Significant with Mitigation Incorporated	Less Than Significant with Mitigation Incorporated	Potentially Significant Impact <sup>4</sup>	Potentially Significant Impact

<sup>1</sup> No Impact – Impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

<sup>2</sup> Less Than Significant – Impacts are perceived as negative but do not exceed environmental thresholds.

<sup>3</sup> Less Than Significant with Mitigation Incorporated – Impacts are perceived as negative and may exceed environmental thresholds depending on project and site-specific circumstances, but are Less Than Significant with mitigation incorporated.

<sup>4</sup> Potentially Significant Impact – Impacts with feasible mitigation may be reduced to levels that are not significant or avoided all together. Without mitigation, significant impacts would exceed environmental thresholds.

### *Project Visual Description*

The Proposed Project would include the low-profile electric substation, with a new 85-foot-tall TSP riser at the northeast corner of Riggin Avenue and North Mooney Boulevard connecting to the existing overhead 66 kV subtransmission line, and new underground subtransmission lines. The proposed substation would be situated on approximately two acres of flat agricultural land approximately 250 feet north of Riggin Avenue, necessitating the removal of existing walnut trees and a portion of the existing chain link fence surrounding the existing C. R. Shannon Ranch office complex.

As seen from the north, and specifically from the future Ranch Circle Drive, there would be visual penetration into the new substation at the entrance gate, which is intended to be a chain link fence gate. Visual penetration into the substation is not desirable for aesthetic reasons, as well as safety and security, and therefore, visual mitigation is recommended below.

As seen from KOP 1, the Proposed Project would create a new 66/12 kV substation that would be visible from Riggin Avenue. The new underground 66 kV subtransmission line along the extension of Mooney Boulevard and future Ranch Circle Drive would not be visible, and the new TSP riser would not occur in this view. Figures B.3-6A and B.3-6B, respectively, present the existing view from KOP 1 and the SCE simulation of the low-profile substation and concrete screening wall.

The view from KOP 2 would be changed by the new TSP riser in the foreground. This component of the Proposed Project would appear in line with existing wood poles that are approximately 65 feet tall. The TSP riser would include hardware and conductors looping into the pole at appropriate spacing and heights to comply with CPUC requirements, and as such, it would be notably taller and more complex than the existing wood poles. Figures B.3-7A and B.3-7B, respectively, present the existing view from KOP 2 and a simulation of the new TSP riser.

The substation footprint contained within the perimeter wall would be approximately 1.7 acres. The total area of the substation including a buffer area outside the perimeter wall is approximately two acres. The substation would incorporate low-profile design features, which limit the height of the electrical equipment to approximately 15 feet. (In contrast, standard substation design generally includes substation electrical equipment up to 30 feet in height.) The new substation would create a new horizontal line at the new perimeter concrete wall, and a few new horizontal and vertical lines with the electrical equipment inside the substation. None of the features would protrude above the skyline, and therefore the substation would not create any view blockage to any scenic features in the landscape. The substation would create moderate contrast against the walnut grove and would be a co-dominant feature in the landscape with the existing tank, buildings, and parking lot in the foreground. The TSP riser would create moderate contrast in the context of the existing line of wood poles and would be a dominant feature in the open landscape of the intersection in the foreground because its height and diameter are greater than existing wood poles. Future development at this intersection would introduce other foreground features and reduce the contrast of the new pole.

Two additional resources are available from which to draw conclusions about future visual impacts of the substation. In the PEA, SCE presented a photograph of existing visual conditions for a preliminary alternative substation site, in the vicinity of Sedona Avenue and Leila Street (see Figure B.3-8A) and then prepared a visual simulation of this preliminary alternative (see Figure B.3-8B). This simulation shows the effect of removing an existing walnut grove and converting it to a substation. Because of the similarity of the Proposed Project to this simulation, conclusions about changes in visual quality, viewer concern, and viewer exposure can be extrapolated and substantiated for the proposed site based on the simulation.

Figure B.3-8A. Alternative Substation Site in 2006 Without Substation

Figure B.3-8B. Simulation of Alternative Substation Site

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### ***Aesthetics Impacts***

#### ***a. Would the project have a substantial adverse effect on a scenic vista?***

***LESS THAN SIGNIFICANT.*** The overall visual change at and near the proposed substation would be low-to-moderate, and in the context of the existing landscape's low-to-moderate visual sensitivity, and the resulting visual impact would be less than significant. This impact classification is as described in Table B.3.1-1, Visual Impact Significance Criteria. The visual change for the new TSP riser and underground subtransmission line would be moderate and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be less than significant. Effects on a scenic vista, and overall impacts to visual resources as seen from KOP 1 and KOP 2 would be less than significant.

#### ***b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?***

***NO IMPACT.*** The Proposed Project would not damage any existing scenic resources as seen from any designated or eligible State scenic highway. There are no rock formations, historic structures or other striking visual features on the proposed site or in its immediate vicinity. The existing walnut trees are scheduled to be removed as part of the Shannon Ranch development, which has already been approved, and these trees are not visible from any State Scenic Highway.

#### ***c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

***LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.*** The visual change caused by proposed substation would be low-to-moderate, and the change caused by the TSP riser would be moderate. The Proposed Project, taken in conjunction with removal of existing walnut trees that presently create vegetative screening of the site, would degrade the existing visual character of the site. This effect would be exacerbated by the proximity of new residential development and the future Ranch Circle Drive, which will increase the viewer exposure by creating additional nearby observation points. This reasonably foreseeable development would lead to increased dominance of the substation in foreground views. The City of Visalia General Plan includes goals for development sites to incorporate existing amenities to emulate the historical use of the area, including retaining on-site trees and walnut groves, as a means of preserving the area's diminishing agricultural character. With recommended mitigation measures, the Proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings, as described in detail below. Retaining a few selected walnut trees as a landscape buffer for the substation would help preserve landscape character and conform to City of Visalia goals and objectives.

Implementation of Mitigation Measures V-1 and V-2 would either retain selected walnut trees or establish an evergreen vegetative screen and require an opaque gate at the substation entrance to improve the visual character of the new substation. Implementation of Mitigation Measure V-3 would change the color of the 66 kV TSP riser to minimize the moderate contrast caused by the medium gray pole. Due to maintenance concerns, SCE cannot confirm that this measure is feasible, however changing the color and finish of the pole would improve the visual character of the 66 kV TSP riser in the existing context. Implementing these measures would ensure that the Proposed Project would not substantially degrade the existing visual character.

*Mitigation Measures for Impacts to Existing Visual Character*

- V-1 Retain walnut trees or establish evergreen vegetative screen.** SCE shall retain existing walnut trees or establish a permanent evergreen vegetative screen of sufficient height and density to provide for visual screening around the substation, consistent with safety, feasibility, and engineering requirements. SCE shall consult the Shannon Ranch Master Plan Design Guidelines to ensure compatibility of neighborhood design elements, and SCE shall survey existing walnut trees and select trees to be retained as a “nurse-grove,” at the discretion of the City of Visalia. SCE shall provide a water supply and permanent drip irrigation system for landscaping survival. Plant materials selected for screening shall be evergreen and acclimated to the environment of Visalia. Landscape screening shall be consistent with a landscaping and maintenance plan developed by SCE and submitted for review and approval by the City of Visalia. Any dispute that cannot be resolved shall be referred to CPUC staff for timely determination.
- V-2 Construct visually opaque gate at substation entrance.** SCE shall design and construct the gate at the substation entrance in a way that obscures views through the gate, using materials that are compatible with the perimeter screening wall and neighborhood visual standards. SCE shall consult the Shannon Ranch Master Plan Design Guidelines to ensure compatibility of neighborhood design elements. Entrance gate shall be consistent with the landscaping plan developed by SCE and submitted for review and approval by the City of Visalia. Any dispute that cannot be resolved shall be referred to CPUC staff for timely determination.
- V-3 Provide TSP riser surfaces galvanized with appropriate colors, textures, and finishes.** SCE shall install, as available, the tubular steel pole (TSP) riser galvanized with appropriate colors, finishes, and textures to most effectively blend the new steel structure with the dark brown, mottled appearance of the existing wood poles of the Rector-Oak Grove No. 1 66 kV subtransmission line.

With these measures, potential project impacts to anticipated future foreground viewers would be reduced to less than significant levels.

*Construction-Phase Aesthetics Impacts*

**Temporary Access Road.** Depending upon the timing of construction of Ranch Circle Drive, a temporary access road might be constructed from the extended Mooney Boulevard to the substation project site. However, this road would not be visually prominent from any existing viewpoints. After construction of Ranch Circle Drive, viewers would have access to the vicinity of the substation site. However, at that time, the substation driveway would be paved and upgraded to City standards. Therefore, temporary construction-phase visual impacts would be less than significant.

**Temporary Construction Impacts.** Some construction staging could take place within the vicinity of the new substation and existing subtransmission line right-of-way. If extensive ground disturbance were to take place in this area due to construction staging or other activities, it could result in adverse visual effects that could negatively affect the short-term aesthetic environment. Depending upon the extent of such disturbances, these could be potentially significant. Implementing Mitigation Measure V-4 would ensure that ground disturbances are restored so that no long-term impact would occur.

***Mitigation Measure for Construction-Phase Aesthetics***

**V-4 Restore and revegetate ground disturbances due to construction staging.** SCE shall restore all ground disturbances caused by construction, staging, and temporary access road construction to original, natural-appearing contours and shall revegetate disturbed areas at the earliest feasible time.

**d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**LESS THAN SIGNIFICANT WITH MITIGATION.** The substation would be unstaffed and would not involve excessive lighting. SCE proposes that under normal operating conditions, the substation would not be illuminated at night, and that lighting would be used only when required for maintenance outages or emergency repairs occurring at night. SCE also proposes to direct lights downward and shield them to reduce glare. The proposed concrete screen wall and perimeter landscaping would also reduce the impact of light and glare. If all lighting is properly shielded, directed downward, and of minimum brightness necessary for safety, no direct or excessively bright reflective light would be anticipated off-site. Implementation of Mitigation Measure V-5 would ensure that light and glare are properly minimized so that this impact would be less than significant.

***Mitigation Measure for Light and Glare***

**V-5 Shroud and minimize unnecessary sources of light.** SCE shall design and install new permanent substation lighting such that light bulbs, lenses, and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, vicinity, and nighttime sky is minimized. To achieve this, SCE shall ensure that:

- Lighting shall be designed so exterior light fixtures are 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 source is shielded to prevent light trespass outside the project boundary.
- All lighting shall be of minimum necessary brightness consistent with worker safety.
- Wherever feasible and safe, lighting shall be kept off when not in use.

## B.3.2 Agricultural Resources

### AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. **Would the project:**

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.2.1 Setting

The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to assess the location, quantity, and quality of agricultural lands and conversion of these lands to other uses. Every even numbered year, FMMP issues a Farmland Conversion Report. FMMP data are used in elements of some county and city general plans, in regional studies on agricultural land conversion, and in environmental documents as a way of assessing project-specific impacts on Prime Farmland.

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) (formerly Soils Conservation Service), classifies notable agricultural lands as follows:

- **Prime Farmland:** Land that has the best combination of physical and chemical properties for the production of crops
- **Farmland of Statewide Importance:** Similar to Prime Farmland, but with minor shortcomings (e.g., steeper slopes, inability to hold water)
- **Unique Farmland:** Land of lesser quality soils, but recently used for the production of specific high economic value crops.

The State DOC and federal NRCS-designated agricultural lands are herein referred to as Farmland. The economy of the City of Visalia and Tulare County has traditionally been based on agriculture and related industries. Tulare County is the second-leading producer of agricultural commodities in the nation (Tulare County, 2005).

The proposed substation site would not be located on a parcel zoned or designated for agriculture. However, the site is considered to be Prime Farmland (DOC, 2004). The parcel nearest to the site under Williamson Act contract is approximately 0.1 miles southwest of the proposed substation site, across the intersection of Mooney Boulevard and Riggan Avenue, south of the proposed underground 66 kV sub-transmission line.



### B.3.2.2 Environmental Impacts and Mitigation Measures

***a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-agricultural use?***

*LESS THAN SIGNIFICANT.* The proposed substation site would occupy approximately two acres of land presently used for agriculture as a walnut orchard, and it is considered to be Prime Farmland. Additionally, the temporary access road, if needed before the future Ranch Circle Road and Mooney Boulevard extension are built, would require an additional 0.2 acres of Prime Farmland. For both the proposed substation site as well as for the potential route of the access road, Prime Farmland would be converted to a non-agricultural use. Approximately 2,890 acres of Prime Farmland occur in the City of Visalia (DOC, 2004). The Proposed Project would convert approximately 2.2 acres or less than one tenth of one percent of this total.

Under the Visalia General Plan Land Use Element and Municipal Code, the proposed substation site is designated as Shopping/Office Center and zoned as Planned Shopping/Office Commercial (P-C-SO). In the action of creating this zoning, the City of Visalia adopted an Environmental Impact Report guiding this land use designation and zoning along with a Statement of Overriding Considerations in 1991. The 1991 Statement of Overriding Considerations acknowledged that the General Plan would result in the conversion of approximately 13,000 acres of agricultural land. The Proposed Project would convert land designated and zoned for commercial and office uses, and no land designated or zoned for agricultural use would be affected. Consequently, the City of Visalia Resolution 91-105, the 1991 Statement of Overriding Considerations for the Land Use Element, has already addressed the conversion of Prime Farmland to a non-agricultural use. As such, the impact of conversion of Prime Farmland by the Proposed Project would be less than significant.

***b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

*NO IMPACT.* The site of the Proposed Project does not include or border any land zoned for agricultural use, and the Proposed Project would not be located on land that is under a Williamson Act contract. The proposed underground 66 kV subtransmission line would be across the intersection of Mooney Boulevard and Riggin Avenue from a parcel of land under Williamson Act contract. Construction at this location would not conflict with the nearby property under the Williamson Act contract. Therefore, the Proposed Project would not conflict with such lands and there would be no impacts to such lands.

***c. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?***

*LESS THAN SIGNIFICANT.* While the Proposed Project would convert up to approximately 2.2 acres of agricultural land to non-agricultural use, it is not anticipated that the Proposed Project would result in other changes to the environment that would result in the conversion of Farmland to non-agricultural use. The proposed substation would be a single use facility and would not result in conversion of adjacent lands to other uses. As noted in Section B.3.12, Population and Housing, the project would not be growth-inducing and would, therefore, not be expected to substantially induce or exacerbate conversion of agricultural land. Therefore, the impact of possible conversion of Farmland would be less than significant.

### B.3.3 Air Quality

#### AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.3.1 Setting

**Criteria Pollutants.** Air quality is determined by measuring ambient concentrations of criteria pollutants. Air pollutants are those pollutants for which acceptable levels of exposure can be determined and for which standards have been set. The degree of air quality degradation is then compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS). Unique meteorological conditions in California and differences of opinion by medical panels established by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) cause considerable diversity between State and Federal standards currently in effect in California. In general, the CAAQS are more stringent than the corresponding NAAQS. The standards currently in effect in California are shown in Table B.3.3-1.

Table B.3.3-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards
Ozone	1-hour	0.09 ppm	—
	8-hour	0.070 ppm	0.08 ppm
Respirable Particulate Matter (PM <sub>10</sub> )	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual Mean	20 µg/m <sup>3</sup>	—
Fine Particulate Matter (PM <sub>2.5</sub> )	24-hour	—	35 µg/m <sup>3</sup>
	Annual Mean	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm
	8-hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	1-hour	0.18 ppm	—
	Annual Mean	0.030 ppm	0.053 ppm
Sulfur Dioxide (SO <sub>2</sub> )	1-hour	0.25 ppm	—
	24-hour	0.04 ppm	0.14 ppm
	Annual Mean	—	0.03 ppm

Notes: ppm=parts per million; µg/m<sup>3</sup>= micrograms per cubic meter; "—" =no standard  
Source: CARB, 2007.

**Attainment Status and Air Quality Plans.** The U.S. EPA, California Air Resource Board (CARB), and the local air district classify an area as attainment, unclassified, or nonattainment. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. The proposed Riverway Substation would be located within Tulare County, under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The project would be in the southern region of the San Joaquin Valley, which is downwind of substantial sources of air pollution originating in coastal California and the northern San Joaquin Valley. Table B.3.3-2 summarizes attainment status of the criteria pollutants in the San Joaquin Valley with both the federal and state standards.

**Table B.3.3-2. Attainment Status for San Joaquin Valley**

Pollutant	Federal Designation	State Designation
Ozone (1-hour)	No Federal Standard	Nonattainment/Severe
Ozone (8-hour)	Nonattainment/Serious	Nonattainment
PM <sub>10</sub>	Nonattainment/Serious	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO <sub>2</sub>	Unclassified/Attainment	Attainment
SO <sub>2</sub>	Unclassified/Attainment	Attainment

Source: SJVAPCD, 2007; CARB, 2007.

**Rules and Regulations**

**San Joaquin Valley Air Pollution Control District.** Responsibility for developing regional air quality plans within the project area lies with the SJVAPCD. The local air district has the authority to issue permits through its Rules and Regulations by requiring that new stationary sources be subject to New Source Review (NSR) under SJVAPCD Regulation II (Permits). The NSR program ensures that the new stationary sources would not interfere with progress in attainment of State and national ambient air quality standards. Emissions from mobile and portable sources and temporary activities (like construction) are managed through a range of State and federal programs identified below.

- **U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program.** The California Clean Air Act mandates that CARB achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. Tier 1 standards for large compression-ignition engines used in off-road mobile sources went into affect in California in 1996. These standards and ongoing rulemaking jointly address emissions of nitrogen oxides (NOx) and toxic particulate matter from diesel combustion. CARB is also developing a control measure to reduce diesel particulate matter emissions as well as NOx from in-use (existing) off-road diesel equipment throughout the State. Owners and operators of off-road diesel equipment and vehicles would need to begin reporting to CARB in 2008 and meet fleet emissions targets in 2009. Public agencies and utilities are also subject to fleet rules to reduce diesel particulate matter.
- **CARB Portable Equipment Registration Program.** This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program that allows them to operate their equipment throughout California without having to obtain individual permits from local air districts.
- **SJVAPCD Rules 4101 and 4102 (Visible Emissions and Nuisances).** These rules apply to any source of air contaminants, and they prohibit emissions of visible air contaminants to the atmosphere and any activity that creates a public nuisance.

- **SJVAPCD Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).** This rule applies to the use of asphalt for paving, should it be necessary for covering the proposed underground facilities or for restoring roadways disturbed by project activities.
- **SJVAPCD Regulation VIII (Fugitive PM10 Prohibitions).** These rules (Rules 8011 to 8081) are aimed at reducing fugitive PM10 emissions. Sources regulated under these rules include: construction, excavation, earthmoving activities, carryout and trackout, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Regulation VIII was most recently revised in 2004, and violating Regulation VIII would be subject to enforcement action by SJVAPCD. Regulation VIII requires implementation of various dust control measures (watering unpaved surfaces, minimizing vehicle speeds on unpaved surfaces, etc.) to ensure that visible dust emissions are substantially eliminated.

The City of Visalia does not have any additional air pollution control requirements in its Municipal Code or General Plan that would specifically apply to project activities. The Land Use Element of the General Plan includes a goal to improve air quality, by recommending that city actions support the air quality planning efforts of the local air pollution control district (Visalia, 1996).

### B.3.3.2 Environmental Impacts and Mitigation Measures

#### *a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

*NO IMPACT.* The SJVAPCD is the primary agency responsible for managing local air quality and administering other State or federal programs ensuring implementation of the air quality management plan. A project could be inconsistent with the applicable air quality management plan or air quality attainment plan (AQAP) if the project causes population and/or employment growth in excess of the growth estimates included in the AQAP or growth in vehicle-miles traveled exceeding the growth assumptions in the AQAP. The Proposed Project would not, however, create any new full-time or part-time positions of employment. Approximately 25 workers would be needed for substation construction, but none of these positions would be permanent. Regional air quality plans anticipate and allow for population growth in the region, which involves construction of a certain amount of new infrastructure. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plan. No impacts would occur and no mitigation is required.

#### *b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

*DURING CONSTRUCTION, LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Construction of the Proposed Project would involve activity for about twelve months. During construction, emissions would be generated at the proposed substation site, at subtransmission line work areas, at work sites for the telecommunication facilities, and along roadways used to access these locations. The primary construction emissions would be due to exhaust of vehicles and equipment [e.g., ozone precursors (volatile organic compounds or VOC and NO<sub>x</sub>), CO, and PM<sub>10</sub> and PM<sub>2.5</sub>] and fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) from travel on unpaved surfaces and from site earthwork. Heavy-duty diesel and gasoline-powered construction equipment at the work sites would include loaders, graders, backhoes, cranes, and numerous trucks for lifts, delivery, concrete, water, and crew. Beyond the work sites, exhaust emissions would also be caused by workers commuting to and from the project and other vehicles hauling equipment, materials, and supplies to the sites, including dump trucks removing debris.

SCE calculated emissions of NO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC from on-site (or off-road) construction equipment exhaust and on-highway crew trucks. The emissions occurring from worker commute trips and heavy-duty diesel trucks delivering major project components. Emissions of SO<sub>x</sub> are not quantified or expected to be substantial because use of ultra-low sulfur diesel fuel has been required by California law since 2006. Table B.3.3-3 presents the estimated emissions for the temporary construction activity.

**Table B.3.3-3. Estimated Construction Emissions (tons per year)**

	NO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
Substation Construction	5.61	0.24	5.57	0.76
Underground Subtransmission Line and TSP Riser	0.32	0.02	0.33	0.06
Telecommunication Improvements	0.89	0.04	0.86	0.12
<b>Estimated Construction Emissions</b>	<b>6.82</b>	<b>0.3</b>	<b>6.76</b>	<b>0.94</b>

Source: SCE, 2006 (based on equipment listed in Project Description and emissions tables in the URBEMIS7G user's guide).

To determine whether a significant impact would occur, the SJVAPCD recommends a qualitative approach for PM<sub>10</sub> emphasizing implementation of effective and comprehensive control measures for fugitive dust. The SJVAPCD recognizes that construction phase emissions are generally short-term in duration, and because of the high variability of PM<sub>10</sub> emissions during construction, the SJVAPCD has determined that compliance with Regulation VIII for all sites and implementation of other appropriate control measures in the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts sufficiently reduces PM<sub>10</sub> impacts during construction so that impacts would not be significant (SJVAPCD, 2002).

Project-related construction activities would be required to comply with SJVAPCD Regulation VIII, and SCE proposes to implement the applicant-proposed measure (APM Air-1) to control construction dust. The dust control strategies included in APM Air-1 would help to avoid nuisance conditions at construction work sites near sensitive receptors, such as residences. The strategies in APM Air-1 would implement the SJVAPCD dust control recommendations, assuming that no sensitive receptors occur nearby. Because planned residential development is anticipated to occur around the substation site, it is currently unclear as to precisely how close the nearest future home would be. Occupied homes within 200 feet of the two-acre substation site could be expected to experience a nuisance if enhanced dust control measures are not implemented. Implementing Mitigation Measure AQ-1 for enhanced dust control measures for nearby occupied homes would ensure that PM<sub>10</sub> and dust emissions during project construction would not have the potential to violate air quality standards or contribute substantially to existing violations.

The SJVAPCD recognizes that construction equipment and activities also emits carbon monoxide and ozone precursor emissions. However, the SJVAPCD has determined that these emissions may cause a significant air quality impact only in the cases of very large or very intense construction projects (SJVAPCD, 2002). The SJVAPCD guidelines indicate that projects permanently emitting more than 10 tons per year of ozone precursors (NO<sub>x</sub> or VOC) would have significant impacts to ozone. Because project emissions of carbon monoxide, NO<sub>x</sub>, and VOC shown in Table B.3.3-3 would be short-term and would not exceed 10 tons per year, project-related emissions of carbon monoxide and ozone precursors (NO<sub>x</sub> and VOC) would not be likely to violate any air quality standard or contribute substantially to an existing or projected air quality violation. In other recent environmental analyses conducted by the CPUC, the use of off-road equipment (for equipment over 50 hp) that at a minimum meets U.S. EPA/CARB Tier 1 engine standards is considered to be feasible for mitigation of construction equipment exhaust (including PM<sub>10</sub> and PM<sub>2.5</sub>). With Mitigation Measure AQ-2, the impact of construction equipment exhaust would be reduced to a less than significant level.

*Mitigation Measures for Construction-Phase Air Quality*

**AQ-1 Implement enhanced dust control measures in the event that occupied homes occur nearby.** SCE shall implement enhanced dust control measures for construction of the proposed substation if new residential development includes homes within 200 feet of the substation site during any phase of substation construction. The enhanced dust control measures shall incorporate the applicant-proposed measure (APM Air-1) and the following additional measures:

- limit the speeds of construction vehicles on unpaved surfaces to 15 miles per hour,
- install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent,
- suspend excavation and grading activities when winds exceed 20 miles per hour,
- limit size of area subject to excavation, grading, or other construction disturbance at any one time to avoid excessive dust, and
- expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when construction activities are occurring.

**AQ-2 Minimize construction equipment exhaust by using Tier 1 engines.** All diesel fueled off-road construction equipment with engines 50 hp or larger shall at a minimum meet U.S. EPA/CARB Tier 1 engine standards. Records of equipment compliance shall be kept by the general construction contractor. This measure does not apply to equipment permitted by the local air quality district or certified through the CARB's Statewide Portable Equipment Registration Program. This also does not apply to any single specialized equipment items that will be used for less than five days total during the project construction.

*DURING OPERATION, LESS THAN SIGNIFICANT.* During operation, no stationary sources would be associated with the project. The substation would be unstaffed, therefore there would be no emissions associated with regular commuting to and from the substation. Emissions would result from the operation of vehicles used for periodic visits for electrical switching and routine maintenance. SCE personnel would generally visit the substation two to three times per week or as needed under emergency conditions. The air quality impact caused by emissions from project vehicular traffic for operations and maintenance would be less than significant.

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

*DURING CONSTRUCTION, LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Concurrent construction of other projects in close proximity to the Proposed Project (e.g., residential and commercial developments and improvement of Riggins Avenue) could result in local air emissions at the same time as construction emissions caused by the Proposed Project. All of these projects would likely incorporate the SJVAPCD recommendations for minimizing impacts and would need to comply with SJVAPCD rules regarding nuisances and dust control. The pollutants generated by construction of these cumulative projects would, however, contribute to adverse impacts on ambient air quality, if the construction work occurs at the same time as the Proposed Project.

Although the Proposed Project would contribute to regional emissions and adverse cumulative impacts, the contribution of the project with mitigation would be minor. Individually, and with mitigation identified above, the project would not cause a potentially significant air quality impact. Because the project would not individually cause a significant impact, and because the project's contribution to cumulative effects would cease after the 12-month construction phase, impacts to air quality would not be cumulatively considerable.

*DURING OPERATION, LESS THAN SIGNIFICANT.* As noted above, after construction is complete, operational emissions would result only from vehicle use related to periodic maintenance, repair, and inspection of the project components. This light traffic would not result in a cumulatively considerable net increase of any criteria pollutant.

*d. Would the project expose sensitive receptors to substantial pollutant concentrations?*

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Certain residents, such as the very young, the elderly, and those suffering from certain illnesses or disabilities, are particularly sensitive to air pollution and are considered sensitive receptors. Examples of land uses where significant numbers of sensitive receptors are often found include schools, day care centers, parks, recreational areas, medical facilities, rest homes, and convalescent care facilities. Land use conflicts can arise when sensitive receptors are located next to major sources of air pollutant emissions.

Short-term emissions associated with project construction would not generate substantial pollutant concentrations at existing residences because substation construction would primarily occur at least 300 feet away from existing homes, and construction emissions at all sites would be variable and limited over the 12-month construction duration. New housing development planned to occur adjacent to the substation site eventually would result in nearer sensitive receptors. To avoid the possibility of exposing new homes to substantial pollutant concentrations, Mitigation Measure AQ-1 would require implementation of enhanced dust control measures if new homes become occupied before or during substation construction. Emissions during routine operation of the Proposed Project would be minimal, limited to only light and medium-heavy duty truck trips for maintenance. Therefore, with identified mitigation, the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations either during construction or during operation, and this impact would be less than significant.

*e. Would the project create objectionable odors affecting a substantial number of people?*

*NO IMPACT.* The Proposed Project includes short-term construction activity that would involve combustion of diesel fuel and emissions of dust. Odors of construction equipment diesel exhaust would be reduced by the use of either low-sulfur or ultra-low-sulfur fuel. No substances used or activities involved with the project would have the capability to produce offensive odors.

### B.3.4 Biological Resources

#### BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.4.1 Setting

This section describes the biological resources that occur in the Proposed Project area. It includes a description of common communities of plants and wildlife, information addressing special status species and their locations in relation to the Proposed Project, followed by an assessment of potential impacts to these resources. Information used in preparing this section was derived from:

- Proponent's Environmental Assessment for the Riverway Substation Project (SCE, 2006)
- Records of sensitive species locations from the California Natural Diversity Database (CNDDDB, 2007)
- Technical information available through the USFWS and CDFG
- Records of sensitive species locations from the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2007)
- The Jepson Manual (Hickman, 1993)

The Proposed Project would be located in the Visalia 7.5-minute U.S. Geological Survey (USGS) quadrangle in the southwest-quarter of the southwest-quarter Section 18 of T18S, R25E within the City of Visalia north, northeast of the intersection of Riggins Avenue and Mooney Boulevard. While historically the area likely supported a diverse assemblage of plant and wildlife species, urban development, water diversions, and agricultural practices have removed the majority of habitat that once occurred in the project area. Today, the project area is a mix of disturbed ruderal habitat, agricultural areas, landscaped areas, and suburban development. Historic land uses in this area have been characterized by long-term agri-



cultural usage supporting both row crops and orchards. Currently, this area supports ongoing urbanization and residential development.

The proposed substation would be constructed on an approximately two-acre site located entirely within an existing English walnut (*Juglans regia*) orchard that is bordered to the south by a commercial property and to the west by land that is currently under development for residential housing. In the foreseeable future, the proposed substation will be bound on the north by Ranch Circle Drive and additional residential development.

Although subject to historic disturbance, the surrounding area has several waterways and irrigation canals that could support wildlife including: the Saint Johns River; the Modoc Ditch irrigation canal; and the Wutchumna Ditch irrigation canal. The Saint Johns River is located less than one mile north and northeast of the proposed substation. This river is an ephemeral waterway that transports spring run-off from the Sierra Nevada range east of Visalia. The river has a sandy bottom and fairly steep banks which support modest levels of riparian vegetation. The Modoc Ditch is located 0.25 miles northwest of the substation site, and the Wutchumna Ditch is located 0.15 miles to the south. These two canals transport irrigation water to local agricultural lands. These waterways would not be affected by the Proposed Project.

### ***Vegetation Communities***

SCE conducted biological surveys in the area of the Proposed Project during the summer-fall of 2005 and the winter-spring of 2006. A reconnaissance-level survey of the area was then conducted by Aspen Environmental Group and subcontractors on February 22, 2007, and more focused surveys for wildlife and botanical resources were conducted on March 16 and March 19, 2007, respectively. Based on the results of the biological surveys, "English walnut orchard" was the only vegetation community identified for the Proposed Project and project-related activities. The barren, unpaved road extension of Mooney Boulevard bordering the orchard is encompassed within this habitat.

**English Walnut Orchard.** The Proposed Project would be constructed within a English walnut orchard that supports mature 35-foot tall trees. The understory is regularly disked and/or mowed, and portions of the orchard within the proposed footprint were recently disked prior to the botanical survey on March 19, 2007. Evidence for the recent application of herbicide within the orchard was observed near the southern boundary. As a result of the regular disturbance, all but one of the plant species observed on the site are non-native ruderal species adapted to disturbed areas. The single native species observed at the site was common fiddleneck (*Amsinckia menziesii* var. *menziesii*), a weedy native well adapted to disturbance. This species is frequently found in disked, agricultural fields and vacant lots. The most abundant plant species observed within the orchard was chickweed (*Stellaria media*) followed by annual bluegrass (*Poa annua*), foxtail barley (*Hordeum murinum* ssp. *glaucum*), and groundsel (*Senecio vulgaris*). Other species observed at lower abundance include sow thistle (*Sonchus oleraceus*), ripgut brome (*Bromus diandrus*), shepherd's purse (*Capsella bursa-pastoris*), dead nettle (*Lamium amplexicaule*), Persian speedwell (*Veronica persica*), prickly lettuce (*Lactuca serriola*), rose clover (*Trifolium hirtum*), cheese weed (*Malva neglecta*), London rocket (*Sisymbrium irio*), and curly dock (*Rumex crispus*).

Reptiles were not observed on the site during site surveys but may occur in the orchard or adjacent fields. Species that have the potential to occur on the site include southern alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*), Gilbert's skink (*Eumeces gilberti*), and Pacific gopher snake (*Pituophis catenifer catenifer*).

Birds were the most common wildlife species observed during the surveys and included mourning dove (*Zenaida macroura*, observed), rock dove (*Columbia livia*), northern flicker (*Colaptes auratus*), and Amer-

ican crow (*Corvus brachyrhynchos*). Other avian species that have the potential to occur within the English walnut orchard include great horned owl (*Bubo virginianus*), western kingbird (*Tyrannus verticalis*), barn swallow (*Hirundo rustica*), northern mockingbird (*Mimus polyglottis*), European starling (*Sturnus vulgaris*), red-winged blackbird (*Agelaius phoeniceus*), brown-headed cowbird (*Molothrus ater*), house sparrow (*Passer domesticus*), and western scrub Jay (*Aphelocoma californica*).

Mammals that have the potential to occur on the site include Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus maniculatus*), and house mouse (*Mus musculus*).

### ***Special-Status Plants and Animals***

Special-status species include flora, fauna, and vegetation communities that are listed as threatened or endangered species, candidate species, or species of special concern under the California or Federal Endangered Species Act (ESA), species that are listed as fully protected by the California Department of Fish and Game (CDFG), and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California and beyond.

Federal Endangered Species Act provisions protect federally listed threatened and endangered species and their habitats from unlawful take. Under the ESA, “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The U.S. Fish and Wildlife Service’s (Service) regulations define harm to mean “an act which actually kills or injures wildlife.” Such an act “may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR 17.3). Activities that may result in “take” of individuals are regulated by the Fish and Wildlife Service.

Candidate species are not afforded any legal protection under ESA; however, candidate species typically receive special attention from federal and State agencies during the environmental review process. Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and State regulations. The federal Migratory Bird Treaty Act<sup>1</sup> (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

Provisions of California Endangered Species Act protect State-listed threatened and endangered species. The CDFG regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”), but habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code. The California Fish and Game Code contains lists of vertebrate species designated as “fully protected” (California Fish & Game Code §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed.

In addition to federal and State-listed species, the CDFG also has produced a list of Species of Special Concern to serve as a “watch list.” Species on this list are of limited distribution, or the extent of their habitats has been reduced substantially such that threat to their populations may be imminent. Species of Special Concern may receive special attention during environmental review, but they do not have statutory protection. The U.S. Fish and Wildlife Service also uses the label, “Species of Concern,” as an informal term that refers to those species that might be in need of concentrated conservation actions.

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<sup>1</sup> 16 U.S.C., Sec. 703, Supp. I, 1989.

Species of Concern receive no legal protection as a result of their designation, and the use of the term does not necessarily mean that the species would eventually be proposed for listing as a threatened or endangered species. However, most, if not all, of these species are currently protected by State and federal laws.

Birds of prey are protected in California under the State Fish and Game Code.<sup>2</sup> Section 3503.5 of the code states it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto.” Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFG.

**Plants**

The project area has largely been subject to repeated disturbance from agricultural practices over the last fifty years and the potential for rare plants is limited. However, a query of special-status (including State and federally listed) plants in the California Natural Diversity Database (CNDDDB, 2007) was performed for the nine USGS 7.5-minute quadrangles surrounding the project area. The CNPS Inventory was then queried to produce a similar list for Tulare County. Each species listed in CNDDDB or CNPS records was analyzed for rarity. Special-status plant species with the potential to occur in the project vicinity are listed in Table B.3.4-1.

**Table B.3.4-1. Special-Status Plant Species that Could Occur in the Project Vicinity**

Species	Status	Habitat	Occurrence in Study Area
<b>Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act</b>			
Kaweah brodiaea ( <i>Brodiaea insignis</i> )	CE	Cismontane woodland, Meadows and seeps, Valley and foothill grassland/ granitic or clay at elevations between 492 and 4593 feet. Blooms Apr-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.
California jewel-flower ( <i>Caulanthus californicus</i> )	CE, FE	Chenopod scrub, Pinyon and juniper woodland, Valley and foothill grassland/ sandy at elevations between 230 and 3281 feet. Blooms Feb-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	FT	Vernal pools at elevations between 82 and 820 feet. Blooms Jul-Aug.	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
Springville clarkia ( <i>Clarkia springvillensis</i> )	CE, FT	Chaparral, Cismontane woodland, Valley and foothill grassland/granitic at elevations between 804 and 4003 feet. Blooms May-Jul.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Kern mallow ( <i>Eremalche kernensis</i> )	FE	Chenopod scrub, Valley and foothill grassland at elevations between 230 and 3281 feet. Blooms Mar-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Striped adobe-lily ( <i>Fritillaria striata</i> )	CT	Cismontane woodland, Valley and foothill grassland/usually clay at elevations between 443 and 4774 feet. Blooms Feb-Apr.	<b>Absent.</b> Suitable habitat does not occur on the project site.
San Joaquin woollythreads ( <i>Monolopia congdonii</i> )	FE	Chenopod scrub, Valley and foothill grassland (sandy) at elevations between 197 and 2625 feet. Blooms Feb-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.

<sup>2</sup> Section 3503.5, 1992.

**Table B.3.4-1. Special-Status Plant Species that Could Occur in the Project Vicinity**

<b>Species</b>	<b>Status</b>	<b>Habitat</b>	<b>Occurrence in Study Area</b>
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	CE, FT	Vernal pools at elevations between 33 and 2477 feet. Blooms Apr-Sep.	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	CE, FT	Cismontane woodland, Valley and foothill grassland/adobe clay at elevations between 295 and 2625 feet. Blooms Mar-Apr.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Keck's checkerbloom ( <i>Sidalcea keckii</i> )	FE	Cismontane woodland, Valley and foothill grassland/serpentinite, clay at elevations between 394 and 1394 feet. Blooms Apr-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Greene's tuctoria ( <i>Tuctoria greenei</i> )	CR, FE	Vernal pools at elevations between 98 and 3510 feet. May-Jul (Sep).	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
<b>Other Special-Status Plants Listed by CNPS</b>			
Heartscale ( <i>Atriplex cordulata</i> )	List 1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland (sandy)/saline or alkaline at elevations between 0 and 1230 feet. Blooms Apr-Oct.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Brittlescale ( <i>Atriplex depressa</i> )	List 1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools/alkaline, clay at elevations between 0 and 1050 feet. Blooms May-Oct.	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
Earlimart orache ( <i>Atriplex erecticaulis</i> )	List 1B.2	Valley and foothill grassland at elevations between 131 and 328 feet. Blooms Aug-Sep.	<b>Absent.</b> Suitable habitat does not occur on the project site.
San Joaquin spearscale ( <i>Atriplex joaquiniana</i> )	List 1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland/alkaline at elevations between 0 and 2740 feet. Blooms Apr-Oct.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Lesser saltscale ( <i>Atriplex minuscula</i> )	List 1B.1	Chenopod scrub, Playas, Valley and foothill grassland/alkaline, sandy at elevations between 49 and 656 feet. Blooms May-Oct.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Vernal pool smallscale ( <i>Atriplex persistens</i> )	List 1B.2	Vernal pools (alkaline) at elevations between 33 and 377 feet. Blooms Jun-Oct.	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
Subtle orache ( <i>Atriplex subtilis</i> )	List 1B.2	Valley and foothill grassland at elevations between 131 and 328 feet. Blooms Jun-Aug (Oct).	<b>Absent.</b> Suitable habitat does not occur on the project site.
Alkali mariposa lily ( <i>Calochortus striatus</i> )	List 1B.2	Chaparral, Chenopod scrub, Mojavean desert scrub, Meadows and seeps/alkaline, mesic at elevations between 230 and 5233 feet. Blooms Apr-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Ewan's larkspur ( <i>Delphinium hansenii</i> ssp. ewanianum)	List 4.2	Cismontane woodland, Valley and foothill grassland/rocky at elevations between 197 and 1969 feet. Blooms Mar-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Recurved larkspur ( <i>Delphinium recurvatum</i> )	List 1B.2	Chenopod scrub, Cismontane woodland, Valley and foothill grassland/alkaline at elevations between 10 and 2461 feet. Blooms Mar-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.

**Table B.3.4-1. Special-Status Plant Species that Could Occur in the Project Vicinity**

<b>Species</b>	<b>Status</b>	<b>Habitat</b>	<b>Occurrence in Study Area</b>
Mouse buckwheat ( <i>Eriogonum nudum</i> var. <i>murinum</i> )	List 1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland/sandy at elevations between 1198 and 3707 feet. Blooms Jun-Nov.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Spiny-sepaled button-celery ( <i>Eryngium spinosepalum</i> )	List 1B.2	Valley and foothill grassland, Vernal pools at elevations between 262 and 837 feet. Blooms Apr-May.	<b>Absent.</b> Suitable vernal pool or wetland habitat does not occur on the project site.
Golden goodmania ( <i>Goodmania luteola</i> )	List 4.2	Mojavean desert scrub, Meadows and seeps, Playas, Valley and foothill grassland/alkaline or clay at elevations between 66 and 7218 feet. Blooms Apr-Aug.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Ferris' goldfields ( <i>Lasthenia ferrisiae</i> )	List 4.2	Vernal pools (alkaline, clay) at elevations between 66 and 2297 feet. Blooms Feb-May.	<b>Absent.</b> Vernal pool habitat does not occur on the project site.
Coulter's goldfields ( <i>Lasthenia glabrata</i> ssp. <i>coulteri</i> )	List 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools at elevations between 0 and 4003 feet. Blooms Feb-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Sylvan microseris ( <i>Microseris sylvatica</i> )	List 4.2	Chaparral, Cismontane woodland, Great Basin scrub, Pinyon and juniper woodland, Valley and foothill grassland (serpentinite) at elevations between 148 and 4921 feet. Blooms Mar-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Calico monkey flower ( <i>Mimulus pictus</i> )	List 1B.2	Broadleafed upland forest, Cismontane woodland with granitic substrates, and disturbed areas between 3258 and 4265 feet. Blooms Mar-May.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Crowned muilla ( <i>Muilla coronata</i> )	List 4.2	Chenopod scrub, Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland at elevations between 2510 and 6430 feet. Blooms Mar-Apr.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Little mousetail ( <i>Myosurus minimus</i> ssp. <i>apus</i> )	List 3.1	Valley and foothill grassland, Vernal pools (alkaline) at elevations between 66 and 2100 feet. Blooms Mar-Jun.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Piute Mountains navarretia ( <i>Navarretia setiloba</i> )	List 1B.1	Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland/clay or gravelly loam at elevations between 1001 and 6890 feet. Blooms Apr-Jul.	<b>Absent.</b> Suitable habitat does not occur on the project site.
San Joaquin bluecurls ( <i>Trichostema ovatum</i> )	List 4.2	Chenopod scrub, Valley and foothill grassland at elevations between 213 and 1050 feet. Blooms Jul-Oct.	<b>Absent.</b> Suitable habitat does not occur on the project site.

**Definitions Regarding Potential Occurrence:**

Present:	Species or sign of its presence observed on the site
Likely:	Species or sign not observed on the site, but reasonably certain to occur on the site
Possible:	Species or sign not observed on the site, but conditions suitable for occurrence
Unlikely:	Species or sign not observed on the site, conditions marginal for occurrence
Absent:	Species or sign not observed on the site, conditions unsuitable for occurrence

**STATUS CODES:**

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CP	California Protected
		CSC	California Species of Special Concern

(continued)

- CNPS California Native Plant Society Listing  
 1A Plants Presumed Extinct in California  
 1B Plants Rare, Threatened, or Endangered in California and elsewhere  
 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere  
 3 Plants about which we need more information – a review list  
 4 Plants of limited distribution – a watch list

**Wildlife**

Prior to the site surveys for wildlife, information concerning the known distribution of threatened, endangered, or other special-status wildlife species with potential to occur in the vicinity of the site was collected from several sources and reviewed. The sources included the California Natural Diversity Database (CNDDDB, 2007) and other information available through the Service, CDFG, Museum of Vertebrate Zoology, and California Academy of Sciences. Special-status wildlife species with the potential to occur in the project vicinity are listed in Table B.3.4-2.

**Table B.3.4-2. Special-Status Animal Species that Could Occur in the Project Vicinity**

Species	Status	Habitat	Occurrence in Study Area
<b>Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act</b>			
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	FE	Clear to highly turbid vernal pools, either mud- or grass-bottomed.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	FT	Grassland swales, slumps or basalt-flow depressions with grass or mud substrate.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	FT, CT	Breeds in elderberry bushes ( <i>Sambucus</i> spp.) with stem diameter > 1 inch	<b>Absent.</b> Host plant is absent from the project site.
California tiger salamander ( <i>Ambystoma californiense</i> )	FT, CSC	Breeds in vernal pools and stock ponds of central California; adults aestivate in California ground squirrel and pocket gopher burrows adjacent to breeding sites.	<b>Absent.</b> Neither breeding nor aestivation habitat occurs on the project site. Additionally, there are no known breeding ponds within one mile of the site.
Blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	FE, CE	Inhabit open, sparsely vegetated habitats, grasslands and saltbush scrub.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Swainson's hawk ( <i>Buteo swainsoni</i> )	CT	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields.	<b>Absent.</b> Suitable foraging and nesting habitat are absent from the project site.
Tipton kangaroo rat ( <i>Dipodomys nitratoides nitratoides</i> )	FE, CE	Arid, level lands of southern San Joaquin Valley in saltbush and scrub habitats	<b>Absent.</b> Suitable habitat does not occur on the project site.
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	FE, CT	Arid grassland and scrub habitats throughout San Joaquin Valley	<b>Unlikely.</b> Orchard habitat on the site lacks escape structures and is not contiguous with suitable, occupied habitat; transient kit foxes may rarely pass through the orchard.
<b>Federal Candidate Species and State Species of Special Concern</b>			
Western spade-foot toad ( <i>Scaphiopus hammondi</i> )	CSC	Breeds and forages in vernal pools and other bodies of water in grasslands, aestivates in small mammal burrows especially those of California ground squirrel and pocket gopher	<b>Absent.</b> Suitable habitat does not occur on the project site.

**Table B.3.4-2. Special-Status Animal Species that Could Occur in the Project Vicinity**

Species	Status	Habitat	Occurrence in Study Area
Mountain plover ( <i>Charadrius montanus</i> )	FPT, CSC	Breeds in short-grass prairie mainly in Colorado, wintering in California in grassland habitats.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Northern harrier ( <i>Circus cyaneus</i> )	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Prairie falcon ( <i>Falco mexicanus</i> )	CSC	Annual grasslands of valley to alpine meadows; requires cliff or rock outcroppings for nesting.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Burrowing owl ( <i>Athene cunicularia</i> )	CSC	Open, dry grasslands, deserts and ruderal areas with suitable small mammal burrows especially those of California ground squirrels.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	<b>Absent.</b> Suitable habitat does not occur on the project site.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	CSC	Colonies established and breed in tules, marshes and cattails during winter	<b>Absent.</b> Suitable habitat does not occur on the project site.
American badger ( <i>Taxidea taxus</i> )	CSC	Expansive grassland with friable soils and adequate prey base.	<b>Absent.</b> Suitable habitat does not occur on the project site.

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- Possible: Species or sign not observed on the site, but conditions suitable for occurrence
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**STATUS CODES:**

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FPT	Federal Threatened (Proposed)	CP	California Protected
FC	Federal Candidate	CSC	California Species of Special Concern

***Jurisdictional Waters***

Areas meeting the regulatory definition of “Waters of the U.S.” (jurisdictional waters) or State jurisdictional waters were not identified in the immediate area of the project site. No wetlands or waterways potentially under the jurisdiction of either the USACE or CDFG are present within, or adjacent to, the Proposed Project site or areas of project-related activity.

**B.3.4.2 Environmental Impacts and Mitigation Measures**

- a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

***LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.*** The Proposed Project would include the two-acre substation within the English walnut orchard. It would also include underground subtransmission lines and new fiber optic cable and communication equipment that would follow the temporary

site access road and dirt road that currently extends north from the intersection of Riggin Avenue and Mooney Boulevard. The proposed access road and underground facilities would also occur in the English walnut orchard.

The Proposed Project site, including the proposed access road and existing roadways in which the proposed subtransmission lines and new fiber optic cable and communication equipment would be installed, lacks suitable habitat for special-status plants species. The site also lacks suitable habitat for most special-status animals. Species potentially affected by site development or otherwise of concern to State and federal agencies are identified below.

### ***Special-Status Plant Species***

The Proposed Project site consists of a mature, English walnut orchard that has been managed for agricultural production for many years. Consequently, suitable habitat for special-status plant species is not present on the site. The build-out of the Proposed Project would not impact any special-plant species, and no mitigation measures are warranted.

### ***Special-Status Animal Species***

The project site consists of the disturbed walnut orchard and lacks suitable habitat to support most of the sensitive wildlife species listed in Table B.3.4-2. However, the project falls within the known range of San Joaquin kit fox (*Vulpes macrotis mutica*), and this species may rarely occur on the site. A discussion of the potential impacts to San Joaquin kit fox is provided below.

**San Joaquin Kit Fox. Federal Status: Endangered; State Status: Threatened.** The San Joaquin kit fox was listed as endangered by the U.S. Department of the Interior in 1967 (Service, 1967) and as threatened by the State of California in 1971. The San Joaquin kit fox is primarily nocturnal and typically occurs in valley and foothill grassland, or mixed shrub/grassland habitats throughout low, rolling hills and valleys.

From 1971 to 1975, surveys yielded kit fox sightings east of the Proposed Project site near Ivanhoe (approximately 5 to 10 miles), southward towards Lindsay (approximately 15 miles southeast of the site), and from Lindsay to the Tipton area (20 miles south of the site). The CNDDDB (2007) lists these 10 kit fox sightings as road kills, den locations, or individual foxes near dens. These animals most likely were outliers from the Porterville satellite population detailed in the Recovery Plan (Service, 1998). The current status of the Porterville population is unknown, but it is likely in decline as a result of habitat loss. The kit fox observations during the 1970s were generally in association with river and creek corridors, and may reflect the utilization of remnant habitats along waterways.

Since the 1970s, two additional kit fox records in the vicinity of the Proposed Project site have been recorded in the CNDDDB (2007). The first was in 1988, approximately 5 miles northeast of the project site, near the Southern Pacific railroad tracks (CNDDDB, 2007). The habitats associated with this record included irrigated pasture and citrus groves (CNDDDB, 2007). The second sighting of a kit fox foraging in a freshly cut alfalfa field was recorded in 2003, approximately 5 miles west of the Proposed Project site near Goshen.

Some unpublished reports contain kit fox sightings not reported in the CNDDDB. The California Department of Transportation (Caltrans) spotlighted the vicinity of Goshen for the Hanford Expressway project in mid August 2000, and a pair of kit foxes was reportedly observed in three locations on four separate occasions (T. Nunes, Caltrans biologist, pers. comm.). Visger and Associates conducted pre-construction



surveys for San Joaquin kit fox on the Betty Drive/Avenue 312 Realignment and Improvement project in July and August 2003, and identified a potential kit fox while spotlighting approximately 1.9 miles north of the realignment project area (Visger and Associates, 2003).

While not every sighting has been confirmed, the records of kit fox combined with the animal's ability to move miles while foraging and substantial distances when dispersing support the conclusion that kit fox occur in the region. The travel route nearest the Proposed Project site is the area along the Saint Johns River, north of the site. Dispersing kit foxes may intermittently travel along this river route, but predation risks from coyotes (*Canis latrans*) and red foxes (*Vulpes vulpes*) can be great along thickly vegetated riparian areas.

The orchard habitat in which the project is proposed has limited functionality for kit foxes because farming practices have reduced the prey base and denning opportunities. Kit foxes are able to travel through orchards, but the Proposed Project is located within a region of the orchard that is less likely to be used. The Proposed Project site adjoins existing commercial and residential developments to the south and a residential development under construction to the west. Thus, the loss of approximately two acres of orchard habitat at this particular location would not adversely affect the local kit fox population due to its location within the landscape and lack of utility for most kit fox functions. The following mitigation measure expands the Applicant-Proposed Measure APM Bio-1 (San Joaquin kit foxes) to eliminate injury or mortality to kit foxes that may, on rare occasion, travel through the orchard. With the following mitigation, direct impacts to kit foxes would be reduced to a less than significant level.

#### ***Mitigation Measure for Special-Status Animal Species***

**B-1 Eliminate injury or mortality to kit foxes during construction.** SCE shall implement the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin kit fox Prior to or During Ground Disturbance (Service, 1999). SCE shall provide the results of the surveys to the CPUC prior to ground disturbance.

#### ***Other Protected Species***

While other special-status species are not expected to utilize the Proposed Project site, migratory birds, including raptors, are known or are expected to nest on the site or within the vicinity. Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and State regulations. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior.

Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFG. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant impact if the species is particularly rare in the region. Construction activities such as tree removal, site grading, etc., that disturb a rare nesting bird on the site or immediately adjacent to the construction zone could constitute a significant impact. The Applicant Proposed Measures APM Bio-2 (Migratory Birds) would require the removal of potential nesting trees outside the breeding season. If trees are removed during the breeding season (March to May) SCE would conduct pre-construction raptor surveys. If nests are located, the nest area will be avoided if feasible (with an appropriate buffer as determined by a qualified biologist. If avoidance is not feasible, the qualified biologist will confer with USFWS and CDFG on nest/chick relocation measures. In addition, implementation of APM Bio-3 (General Biological Resources) would reduce the potential impact to migratory birds and raptors a less than significant level.

Large aerial perching birds are susceptible to electrocution. Because raptors and other large aerial perching birds often perch on tall structures that offer optimal views of potential prey, the design characteristics of transmission poles are a major factor in raptor electrocutions (APLIC 1996, APLIC and Service 2005). Electrocution occurs only when a bird simultaneously contacts two energized phase conductors or an energized conductor and grounded hardware. This happens most frequently when a bird attempts to perch on a transmission pole with insufficient clearance between these elements. Raptor species that utilize the poles for nesting could be electrocuted while landing. Furthermore, nests may be built in areas that are susceptible to electrical charges that may result in fire as well as an electrical outage. The majority of raptor electrocutions are caused by lines that are energized at voltage levels between 1 kV and 69 kV (APLIC 1996), a range encompassing the 66/12 kV substation. The electrocution of State and/or federally protected bird species would constitute a significant impact. However, SCE proposes to implement APM Bio-3 (General Biological Resources), which requires that all subtransmission poles be designed raptor-safe in accordance with the *Suggested Practices for Raptor Protection on Power Lines* (APLIC 1996). This applicant proposed measure would reduce potential impacts to large perching birds to less than significant levels.

***b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

*NO IMPACT.* The affected habitat consists of an English walnut orchard. Riparian habitat or other sensitive natural communities are not present in the Proposed Project footprint, nor would project-related activity affect any riparian habitat or other sensitive natural community.

***c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?***

*NO IMPACT.* The affected habitat comprises an English walnut orchard. Wetlands or areas meeting the regulatory definition of “Waters of the U.S.” are not present within the Proposed Project footprint, nor would project-related activity affect federally protected wetlands that occur in the region.

***d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Orchards are common within the region and the Proposed Project site does not comprise a sensitive wildlife nursery or occur within an established native resident or migratory wildlife corridor. The proposed location is adjacent to existing and ongoing commercial and residential development. The conversion of approximately two acres of an English walnut orchard at this location would not significantly fragment existing wildlife habitats or substantially interfere with wildlife movement. The limited, predictable potential effects of the Proposed Project related to animal movement and the rearing of young are described above within the discussion of impacts to special-status species as they relate to kit fox and avian species (see Section B.3.4.2(a)). Mitigation Measure B-1 would avoid any direct adverse effects of the project on kit fox species and would ensure that the impact to wildlife movement is less than significant.

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

*NO IMPACT.* The City of Visalia has an Oak Tree Preservation Ordinance (Ordinance 9907) that provides guidelines for oak maintenance and preservation, and requires a permit to remove an oak tree. The Proposed Project site comprises an English walnut orchard; no oak trees would be affected.

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?*

*NO IMPACT.* The City of Visalia has not developed, nor is currently participating in the preparation of, a Habitat Conservation Plan or Natural Communities Conservation Plan. Furthermore, the conversion of approximately two acres of an English walnut orchard near the intersection of Riggin Avenue and Mooney Boulevard within the City of Visalia would not conflict with the provisions of any approved local, regional, or State habitat conservation plans.

### B.3.5 Cultural Resources

#### CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.5.1 Setting

##### *Approach to Analysis of Cultural Resources*

A prehistoric and historic site records and literature search of the California Historical Resources Information System, Southern San Joaquin Valley Information Center, California State University Bakersfield (CHRIS/SSJVIC File No. 05-361) was completed by Pacific Legacy on June 3, 2005. Sources included the Southern San Joaquin Valley Information Center site and study base maps, the most recent updates of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), California Historical Landmarks, California Points of Historical Interest, and evaluations of properties reviewed by the State of California Office of Historic Preservation.

##### *Previous Cultural Resources Studies*

There are no known recorded prehistoric or historic archaeological sites or Native American cultural resources in the project area. There are no cultural resources within the project area listed in the NRHP, the CRHR, California Points of Historical Interest, California Inventory of Historic Resources or the California State Historic Landmarks.

##### *Native American Consultation*

The applicant's consultant initiated consultation with the California Native American Heritage Commission (NAHC) via a November 8, 2005 letter describing the project and asking for information on cultural resources in the Sacred Lands Inventory for the project area. NAHC responded, noting that no known Native American cultural resources are in the immediate project area. (Pacific Legacy, 2007:10).

##### *Paleoenvironment*

The Proposed Project would be located on the northwestern edge of Visalia in Tulare County, California. The elevation ranges from roughly 315 to 325 feet above mean sea level. The major drainage nearest to the site is the St. Johns River to the north. The vegetation setting for the site is the California Prairie belt of the Great Valley (Kuchler, 1977); open, flat grasslands punctuated by river and creek drainages. The land that makes up the Proposed Project site and the project vicinity is mainly comprised of orchards and farmland, which is slowly being developed with residential growth of Visalia (Pacific Legacy, 2007:6).

The project area soils are mapped on the Fresno Sheet of the Geologic Map of California (1966) as fan deposits of Quaternary age. These deposits are the product of the Kaweah River and its distributaries includ-

ing the St. Johns River. “Quaternary” is a general term for the Pleistocene and Holocene geochronological epochs. Deposits of Quaternary age therefore may include both Pleistocene and Holocene age accumulations and thus have a potential maximum age of about two-million years and a minimum age in the historic or modern past.

### ***Prehistory***

The Paleoindian Period has few sites identified in the valley, but human remains from the Tulare Lake Basin have been dated to nearly 16,000 years ago, the oldest dated human remains in the Americas (Federal Register: June 1, 2005 70(104):pp. 31515-31518). The Tulare Lake Basin also has yielded some number of fluted points. The Paleo-Indian period begins more than 11,000 years before the present or B.P. with the appearance of fluted point technology and finally comes to an end some 8,000 to 7,000 years ago as the Western Pluvial Lake Tradition (WPLT) fades (Moratto, 1984:90-91). Regionally, the deep components of the Buena Vista Lake site are attributed to the WPLT and have been dated to more than 8,000 years B.P. Summaries of the earliest periods in California prehistory can be found in Fagan (2003) and Moratto (1984:Chapters 2 and 3). Evidence of Paleoindian activity has not been identified from the Buena Vista Lake Basin.

During the Early Period, current thought is that human subsistence was based primarily on the fishing and hunting of large game (Sutton, 1997:12). Grinding tools, such as pestles, mortars, milling stones and manos, appear infrequently during this time in the archaeological record. Other artifacts include hand-molded baked clay net weights, shell beads and ornaments, charmstones and stemmed projectile points. Bone artifacts are rare. Burials are typically fully extended, oriented to the west and generally have associated artifacts, such as quartz crystals (Moratto, 1984:181-182; Sutton, 1997:12). It is clear that occupation in the Buena Vista Lake Basin dates to at least 8,000 B.P. (Sutton, 1997:14). Obsidian hydration from Buena Vista Lake samples suggest the possibility of a Middle Holocene (Early Period) occupational hiatus between 6,000 B.P. and 4,000 B.P.

The Middle Period is characterized by more diversified and generalized subsistence patterns (Moratto, 1984:183; Sutton, 1997:12). Hunting, fowling and fishing continued to provide the basis of subsistence resources with increased emphases on seed processing. Wedel’s (1941) excavations at Buena Vista Lake represent one of the most comprehensive studies in the southern San Joaquin Valley, and Middle Period assemblages are the most significant components at the various sites he investigated. Many of these artifacts are comparable to those found in the Delta and Santa Barbara Channel regions (Wedel, 1941:147-151; Siefkin, 1999:56), suggesting widespread interaction or mobility.

The Late Period represents the most significant ethnographic Yokuts occupation (e.g., Kroeber, 1925; Gayton, 1948; Latta, 1977; Wallace, 1978). During this period, subsistence began to focus on acorn processing and other plant foods with less emphasis on hunting, birding, and fishing (Moratto, 1984:183; Sutton, 1997:12). This period is the most well-represented time period in the southern San Joaquin Valley. In the Buena Vista Lake Basin, there appears to have been a brief hiatus at roughly 2,000 B.P., after which there seems to have been greater activity around the lake shore (Hartzell, 1992:304-305). Before this time, deteriorating environmental conditions apparently led to decreased activity and diminished occupation (Hartzell, 1992:312; Sutton 1997).

### ***Ethnography***

The project parcels are located in an area inhabited historically by the Talumne (Telamne, Telamni) Yokuts (Gayton, 1948; Kroeber, 1925; Latta, 1999; Wallace, 1978). Latta (1999:175) states this tribe had a large rancheria, most likely in the southeastern section of Visalia. They also had a settlement called

*Waitatshulul*, seven miles north of Tulare City. There are no ethnographically documented Tulumne villages in the immediate project area.

At the arrival of Spanish explorers, the San Joaquin Valley and adjacent foothills of the Coast Ranges and Sierra Nevada were occupied by Yokuts, an ethno-linguistic group of more than 40 autonomous, linguistically and culturally related tribelets. Yokuts languages have been grouped into the Penutian family of languages (Silverstein 1978). A substantial body of ethnographic literature documents Yokuts lifeways (e.g., Gayton, 1948; Kroeber, 1925; Kunkel, 1962; Latta, 1999; Wallace, 1978).

The San Joaquin Valley Yokuts practiced a mixed subsistence economy based on fish, waterfowl, freshwater mussels, seeds and roots with less emphasis on tule elk, deer and antelope. Plants used for subsistence included tule and cattail roots, grass nuts, cattail blossoms, and various seeds and bulbs. Tule provided the raw material for a wide variety of household items. Projectile points and knives were commonly manufactured from local chert and, more rarely, from Eastern Sierra obsidians. Trade with neighboring groups was active, including local asphaltum, steatite, and tanned mammal skins exchanged for obsidian and Mojave Desert salt and coastal marine shells used primarily for decorative items.

### ***Regional History***

**Spanish Period.** The Spanish period in the southern San Joaquin Valley included eight Spanish colonial expeditions, including those led by Martin (1804), Moraga-Munoz (1806), Zalvidea-Ruiz (1806), Cabot (1814), Ortega (1815), Father Luis Antonio Martinez (1816), Estudillo (1819), and Rodriquez (1828) (Cook, 1955:54-56).

Native American populations in the region were severely reduced by European diseases introduced by Spanish missionaries and explorers. By 1833, major epidemics had swept through the region leaving Native American populations at less than 75 percent of their pre-contact levels (Wallace, 1978:460). During the historic period, Native Americans were indentured laborers on farms and ranches or sent to live on the Santa Rosa Rancheria and the Tule River Indian Reservation in the American period (Wallace, 1978).

American explorers, mostly traders and beaver trappers, were also moving into the west during this time. Deterioration of relations between the United States and Mexico resulted in the Mexican War, which ended with Mexico relinquishing California to the United States under the Treaty of Guadalupe Hidalgo of 1848.

**American Period (1852-present).** The townsite of Visalia was surveyed in November 1852 and became the Tulare County seat. The name changed to Buena Vista in 1853 and back to Visalia in 1854 (Gudde, 1969; Hoover et al., 1990). The SCE project sites are northwest of Visalia in an area that has been used for agriculture until very recent suburban development. There are no known historically significant buildings, structures, or events located at, or persons associated with, any of the property that would be affected by the Proposed Project (Pacific Legacy, 2007:9).

The proposed substation site is currently occupied by a portion of a walnut orchard planted 36 years ago that has been greatly reduced in size recently by conversion to residential housing projects. A large barn is adjacent to the proposed site and appears to be more than 50 years old with modern modifications. A number of historic ditches (including the Wutchumna Ditch and Modoc Ditch) are near, but not on or adjacent to, the project site. Roads near the site were established more than 50 years ago but have been altered by paving, widening, and repaving. The region is currently a mix of small farms, cattle ranches, and rapidly expanding urban development.

### B.3.5.2 Environmental Impacts and Mitigation Measures

- a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 [§15064.5 generally defines historical resource under CEQA]?*

*LESS THAN SIGNIFICANT.* There are no known historical resources that would be affected by the project or within the project site. The potential impact is less than significant.

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

*LESS THAN SIGNIFICANT.* There are no archaeological resources recorded within the project area. No evidence of prehistoric or historic archaeological resources was observed during a survey of the project area. Research suggests a low regional archaeological sensitivity based on the lack of recorded prehistoric and historic archaeological sites within two miles of the project area.

Previously unknown subsurface intact prehistoric deposits could be inadvertently unearthed during ground-disturbing activities associated with project construction. To minimize the effects of this potential impact, SCE has committed to implement an Applicant Proposed Measure (APM Cult-1). If previously unidentified archaeological resources are unearthed during construction activities, construction would be halted in that area and directed away from the discovery until a qualified archaeologist assesses the significance of the resource. The archaeologist would recommend appropriate measures to record, preserve or recover the resources. This would reduce this impact to a less than significant level because any previously unrecorded or unknown archaeological resource discovered during the course of construction would be subsequently avoided or provided proper treatment.

- c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

*LESS THAN SIGNIFICANT.* A review of geologic and soil maps for Tulare County from the U.S. Department of Agriculture Soil Conservation Service and U.S. Geological Survey indicates that soil types present in this area are of a type unlikely to contain paleontological resources, sites, or unique geologic features within the project area. The project area is underlain by Quaternary age Great Valley fan and basin sedimentary deposits. Fan deposits are not conducive to fossil formation or preservation and are given low or negligible sensitivity. Basin deposits may preserve fossils and are given moderate sensitivity. These relatively young deposits are unlikely to contain paleontological resources.

- d. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

*LESS THAN SIGNIFICANT.* There appears to be a low potential for inadvertent discoveries of buried archaeological deposits during construction within the project area. No human remains are known to be located in the project area. However, there is always the possibility that unmarked burials may be unearthed during construction. To minimize the effects of this potential impact, SCE would implement a measure to halt work (APM Cult-2). If human remains are encountered during construction or any other phase of development, work in the area of the discovery must be halted in that area and directed away from the discovery. This measure would reduce this impact to a less than significant level.

## B.3.6 Geology and Soils

### GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic groundshaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.6.1 Setting

##### *Regional Geologic Setting*

The proposed Riverway Substation would be located in a predominantly agricultural area on the north side of the City of Visalia in Tulare County. Visalia is located close to the geographic center of California, along the southeastern edge of the San Joaquin Valley near the western slope of the Sierra Nevada. The Proposed Project would be less than one mile southwest of the Saint Johns River. The project site is on a flat to gently alluvial plain descending from the nearby Sierra Nevada. The alluvial plain slopes very gently to the southwest from elevation 320 feet to 315 feet across the Proposed Project site. East of the Proposed Project site, the topography steepens as the geology transitions into the more resistant igneous and metamorphic rock of the western Sierra Nevada. The crest of the Sierra Nevada Range rises to elevations over 11,000 feet.

Deeply cut river canyons dissect the western slope of the Sierra Nevada. The eastern slope of the San Joaquin Valley is underlain predominantly by sedimentary deposits derived from erosion of the adjacent Sierra Nevada. The project site is shown on the USGS 7.5-Minute Visalia topographic quadrangle.

##### *Local Geology*

The Proposed Riverway Substation site is underlain predominantly by Holocene aged (less than 11,000 years in age) alluvial fan deposits. These alluvial fan deposits form nearly level to gently rolling slopes with little surface relief.



**Soils**

The soils within the study area are part of the Grangeville Series, although they have been modified by site development and local agricultural uses. The Grangeville soils in the project area consist of well-drained sandy loam formed in alluvial fan deposits. The typical soil profile of the Grangeville sandy loam is sandy loam from zero to 16 inches; fine sandy loam, loam, and sandy loam from 16 to 27 inches; and stratified loamy sand to silt loam from 27 to 67 inches. These soils generally have high potential for corrosion to uncoated steel, low potential for corrosion to concrete, and low hazard of erosion (NRCS, 2007).

**Slope Stability**

Landslides or slope instability should pose no threat to the nearly flat-lying project site.

**Seismicity**

Visalia is located in an area of California with minimal seismic activity. However, the project area may be subject to minor ground shaking associated with large earthquakes on faults of the San Andreas, Sierra Nevada, and Great Valley fault systems. Active faults of the San Andreas system are predominantly right-lateral strike-slip faults accommodating translational movement. The Sierra Nevada fault system consists primarily of normal dip-slip faults, and the Great Valley fault system consists primarily of blind thrust faults.

Active faults in the Sierra Nevada include the range-front faults responsible for uplift of the southern Sierra Nevada Mountains. The range-front faults include the Southern Sierra Nevada fault, the Owens Valley fault, the Independence fault, Little Lake fault, and White Wolf fault. The Great Valley Thrust Faults are responsible for the uplift of the Coast Ranges and for the 1983 Magnitude 6.4 Coalinga Earthquake (Great Valley 13 fault). The Great Valley Thrust faults are divided into 14 faults, identified as Great Valley 1 through Great Valley 14, from north to south.

No known active faults cross or are within the immediate vicinity of the project area. The closest active faults to the project area are the southern-most faults of the Great Valley Thrust system, both located to the northwest of the project site. Characteristics of these faults are presented in Table B.3.6-1. Minor seismic ground shaking may occur due to significant earthquakes on more distant faults.

**Table B.3.6-1. Known Active Faults within 50 miles of the Proposed Riverway Substation Site**

Name of Fault	Approximate Distance and Direction to Closest Surface Trace (miles) <sup>a</sup>	Length (km) <sup>b</sup>	Slip Rate (millimeters per year) <sup>b</sup>	Maximum Earthquake Magnitude <sup>b, c</sup>
Great Valley 13 Blind Thrust	49.3	30	1.5	6.5
Great Valley 14 Blind Thrust	43.7	24	1.5	6.4

a Fault distances obtained using the EQFault computer program (Blake, 2000), based on digitized data adapted and modified from the 2002 CGS fault database.

b Fault parameters from CGS, 2002 and USGS, 2003.

c The maximum earthquake magnitude is the strongest earthquake that appears capable of occurring under the presently known tectonic framework, using the Richter scale.

### B.3.6.2 Environmental Impacts and Mitigation Measures

a. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

*NO IMPACT.* There are no known active faults in the immediate vicinity of the proposed substation site (Blake, 2000). As such, the hazard of direct surface displacement by faulting of any portion of the proposed facility would be non-existent.

ii) *Strong seismic ground shaking?*

*LESS THAN SIGNIFICANT.* The project would be located in an area of minimal seismicity and would only be susceptible to minor groundshaking in the event of a significant earthquake on any of the regional active faults. CGS Probabilistic Seismic Hazard Assessment (PSHA) Maps for were used to estimate peak ground accelerations (PGAs) at the project site resulting in an estimated PGA of 0.17 g. Taking into consideration the uncertainties regarding the size and location of earthquakes and the resulting ground motions that can affect a particular site, PSHA Maps depict peak ground accelerations with a 10 percent probability of being exceeded in 50 years, which equals an annual probability of 1 in 475 of being exceeded each year. Proper design would reduce the threat of damage to the proposed facilities from the potential maximum ground acceleration to less than significant levels.

iii) *Seismic-related ground failure, including liquefaction?*

*LESS THAN SIGNIFICANT.* Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake induced, strong groundshaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects. In addition, densification of the soil resulting in vertical settlement of the ground can also occur. Determining the liquefaction susceptibility requires analysis of: (a) the density and textural characteristics of alluvial sediments; (b) the intensity and duration of groundshaking; and (c) the depth to groundwater. Despite the presence of potentially liquefiable alluvial sediments at the project site, anticipated seismic groundshaking is not expected to cause liquefaction of these sediments. Additionally, a properly designed facility would reduce the minor threat of damage to the proposed facilities as a result of liquefaction to less than significant levels.

iv) *Landslides?*

*NO IMPACT.* The Proposed Project is located on relatively level ground and thus no impact is expected from landslides.

***b. Would the project result in substantial soil erosion or the loss of topsoil?***

*LESS THAN SIGNIFICANT.* The soil type at the proposed substation site is Grangeville sandy loam, which has a slight hazard of erosion on and off roads and trails. Construction would occur in relatively flat terrain. Erosion control best management practices (BMPs) would be used where excavation and grading occurs as would be required by the project NPDES permits and the SWPPP plan. With proper construction practices there should be no notable erosion or transport of sediment from the site. Engineering-level geotechnical studies would be completed to ensure that the project design adequately accounts for site-specific soil conditions. Considering these factors, there should be little or no impact due to erosion or loss of topsoil. Potential impacts would be less than significant.

***c. Would the project be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

*NO IMPACT.* The Proposed Project would be in an area of soils belonging to the Grangeville Series as mapped by the NRCS. The soil series consists of well-drained relatively flat lying soils and are not subject to off-site landslide, liquefaction, subsidence, lateral spreading, or collapse. Construction for the proposed project would include only minor grading which would not result in slope or other geologic instability. No impact is expected.

***d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

*LESS THAN SIGNIFICANT.* The Grangeville sandy loam contains only minor amounts of clay and is not expected to be expansive. Engineering-level geotechnical studies would be completed to ensure that on-site soil characteristics are verified and addressed by the project design. There should be no risk to life or property under these conditions, and this impact would be less than significant.

***e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

*NO IMPACT.* The soils in the project area are capable of supporting septic systems, and do so for the nearby properties. There would not be any impact.

### B.3.7 Hazards and Hazardous Materials

#### HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.7.1 Setting

This section addresses issues related to environmental hazards and hazardous materials in the existing conditions. Environmental hazards include existing subsurface contamination, the risk of wildfire, and aircraft safety. Hazardous materials include fuel, oil, and lubricants. If encountered, contaminated soil can pose a health and safety threat to workers or the public.

In 2006, SCE commissioned a Phase I environmental site assessment for the 9.4 acre parcel at 2050 Riggin Avenue (GeoTrans, Inc., 2006). The parcel subject to the Phase I site assessment included the roughly two-acre Proposed Project site and the adjacent commercial property at the northeast corner of Riggin Avenue and Mooney Boulevard. The property has been occupied by a farming equipment supply company and has been used primarily for office space and storage of agricultural equipment related to operation of adjacent farmlands.<sup>3</sup> The proposed substation site is currently under SCE control.

<sup>3</sup> The Phase I site assessment included the C. R. Shannon (CRS) Ranch Office Complex, within the property that is occupied by the walnut orchard, the farming operations office, and equipment maintenance facility run by CRS Farming (GeoTrans, 2006)

The Phase I site assessment provides a review of past and current uses of the subject parcel and adjacent properties along with an interview of workers familiar with use and history of the site. The following federal and State databases were reviewed:

- **Federal ASTM Standard and Supplemental Databases.** National Priority List (NPL), Federal RCRA corrective actions list (CORRACTS), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), CERCLIS No Further Remedial Action Planned (NFRAP), Resource Conservation and Recovery Information System (RCRIS) TSD and Generators, Emergency Response Notification System (ERNS), and others.
- **State and Local Databases.** California DTSC State Sites, State Spills List (SLIC), Solid Waste Landfills, Leaking Underground Storage Tanks (LUST), Aboveground Petroleum Storage Tank Facilities (AST), State Underground Storage Tank listings, Tulare County CUPA, and others.

The environmental databases reviewed as part of the Phase I study indicate that no known or potentially contaminated sites occur in the vicinity of the Proposed Project (GeoTrans, 2006). The walnut orchard has been present at the site since 1939. This long history of agricultural use results in a significant potential for residual herbicides, pesticides, and fumigants in the soil.

### ***Applicable Regulations***

Hazardous substances are defined by federal and State regulations that aim to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be considered hazardous. Hazardous substances are defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 101(14), and also in the California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261, which provides the following definition:

*A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.*

For this analysis, soil that is excavated from a site containing hazardous materials would be considered to be a hazardous waste if it exceeded specific CCR Title 22 criteria or criteria defined in CERCLA or other relevant federal regulations. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials occurs; it may also be required if certain other activities occur. Even if soils or groundwater at a contaminated site do not have the characteristics required to be defined as hazardous wastes, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking lead jurisdiction.

### **Federal**

The federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the U.S. Environmental Protection Agency (EPA) for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

CERCLA, including the Superfund program, was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

### **State of California**

The California Environmental Protection Agency (Cal/EPA) was created in 1991, which unified California's environmental authority in a single cabinet-level agency and brought the Air Resources Board (ARB), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), Integrated Waste Management Board (IWMB), DTSC, Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation (DPR) under one agency. These agencies were placed within the Cal/EPA "umbrella" for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Their mission is to restore, protect and enhance the environment, to ensure public health, environmental quality, and economic vitality.

The California Hazardous Waste Control Law (HWCL) is administered by Cal/EPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

Department of Toxic Substance Control (DTSC) is a department of Cal/EPA and is the primary agency in California that regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

#### **B.3.7.2 Environmental Impacts and Mitigation Measures**

- a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

*LESS THAN SIGNIFICANT.* Operation and maintenance of the proposed substation would involve periodic and routine transport, use, and disposal of minor amounts of hazardous materials, primarily mineral oil

and petroleum products (lubricating and insulating oils). Proper handling of these materials would avoid any significant hazards to the public or the environment, which would minimize the impact of use of these materials. SCE would prepare a Spill Prevention, Countermeasure, and Control (SPCC) Plan for the substation prior to any oil containing equipment being brought to the site, and the substation design would include spill control features such as curbs and berms to implement the SPCC.

Hazardous or flammable materials used during construction would consist primarily of vehicle fuels (gasoline and diesel), oil, and lubricants. No acutely hazardous materials would be used or stored onsite (SCE, 2007). Minor spills or releases of hazardous materials could occur due to improper handling and/or storage practices during construction activities. These potential impacts would be avoided by SCE implementing a site-specific Construction Storm Water Pollution Prevention Plan (SWPPP) and training construction personnel in the handling and storage of hazardous materials in compliance with OSHA standards (as described in PEA Section 4.7.4). With these measures in place, transport, use, and disposal of hazardous materials would not pose a significant hazard, and the impact would be less than significant.

***b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

***LESS THAN SIGNIFICANT.*** Implementation of SCE's proposed measures for spill prevention and hazardous substance control as discussed in Section B.3.7.2(a) would reduce the potential impact from upset or accidental spills of hazardous materials to a less than significant level.

***c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

***NO IMPACT.*** No schools are currently located within one-quarter mile of the proposed Riverway Substation. Because no school is within one-quarter mile of the site there would be no impact.

***d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

***LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.*** A Phase I environmental site assessment (GeoTrans, 2006), including review of environmental databases, for the property of the Proposed Project indicated that no known or potentially contaminated sites were at or adjacent to the site. However, the project site has a long history of agricultural use with walnut orchards since 1939, and as such the soils underlying the project site may contain significant levels of residual herbicides, pesticides, and/or fumigants. Disturbing these materials could result in a potentially significant impact. To minimize potential hazards of encountering pesticide, herbicide, and/or fumigant contaminated soil during construction of the proposed substation and associated underground facilities, implementation of Mitigation Measure H-1 is recommended. The recommended mitigation measure would reduce this potential hazard to the public or environment to a less than significant level.

#### ***Mitigation Measure for Hazards and Hazardous Materials***

**H-1 Control release of residual herbicides, pesticides, and/or fumigants.** SCE shall analyze soil samples in construction areas where the land has historically or is currently being farmed to verify and delineate the possibility of and extent of herbicide, pesticide, and/or fumigant contamination of the underlying soils. Samples shall be collected by properly trained personnel and submitted to a state approved laboratory for analysis. Any soil with pesticide, herbicide, or fumigant

concentration levels that exceed California State Title 26 threshold limits would be classified as hazardous material. SCE shall implement appropriate handling and disposal procedures for any excavated materials containing elevated levels of contaminants. Prior to disturbing additional contaminated soil, SCE shall prepare and submit a health and safety plan that is approved by a certified industrial hygienist to address handling, treatment, and/or disposal options. Personnel working around, handling, and disposing of contaminated soil shall meet the federal OSHA requirement for the 40-hour Hazardous Waste Operations and Emergency Response Standard. The investigation results, and health and safety plan if needed, shall be submitted for review and approval by the appropriate regulatory agencies (i.e., Department of Toxic Substances Control and/or Regional Water Quality Control Board). SCE shall submit to the CPUC copies of correspondence with regulatory agencies including the health and safety plan and any approvals.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

*NO IMPACT.* No airports lie within two miles of the proposed substation site; therefore, there is no potential impact to public safety associated with aircraft operations.

- f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

*NO IMPACT.* No private airstrips are within the vicinity of the proposed substation site; therefore, there is no potential impact to public safety associated with aircraft operations.

- g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

*NO IMPACT.* Construction of the proposed substation would occur in an area of mixed agricultural land and new residential developments. Access would be provided via the future Ranch Circle Drive. In the event that the future Ranch Circle Drive and North Mooney Boulevard extension are not built in time for construction, a temporary unpaved access road would be built to the proposed site through the adjacent properties. Construction would not involve obstruction of existing or future roadways, and work would not impair or interfere with adopted emergency response plans or emergency evacuation plans. Operation and maintenance of the proposed substation would also have no impact to adopted emergency response plans or emergency evacuation plans. Additional information on project impacts to emergency vehicle access is provided in Section B.3.15, Transportation/Traffic.

- h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

*NO IMPACT.* The proposed project site is located in an area of primarily agricultural uses surrounded by other agricultural land and recent residential development. There is no potential impact from wildland fires to the proposed project site.



### B.3.8 Hydrology and Water Quality

#### HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate Regional Water Quality Control Board water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater discharge such that there would be a net deficit in the aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Cause inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.8.1 Setting

The proposed Riverway Substation Project would be constructed on what is currently approximately two acres of irrigated agricultural land. Drainage in the area consists of irrigation canals and the Saint Johns River. The nearest irrigation supply canal is approximately 850 feet of the Proposed Site. The Saint Johns River is 3,800 feet north and east of the site, and the 100-year floodplain of the Saint Johns River is approximately 3,500 feet from the project site (FEMA, 1998). The site is within the dam failure inundation area of Kaweah Dam, located approximately 20 miles east of the project site (Tulare County, 2007). This inundation area, at the location of the project site, is approximately 20 miles wide. The site is over the Kaweah Groundwater Basin. Historically, recent depth to groundwater in the vicinity of the site is not less than 25 feet (DWR, 2007).

### B.3.8.2 Environmental Impacts and Mitigation Measures

*a. Would the project violate any water quality standards or waste discharge requirements?*

*LESS THAN SIGNIFICANT.* The Proposed Project would not involve the discharge of waste into a water-course. There is a potential for construction-related discharges affecting water quality, but these would be avoided or minimized through the implementation of a Storm Water Pollution Prevention Plan as required by the Regional Water Quality Control Board. Operational-related risks to water quality could occur from spills from substation equipment, but these would be avoided or minimized through the use of onsite spill prevention controls and countermeasures such as curbs, berms, and site drainage to the proposed retention basin (Figure B.1-6). With these preventative measures and features in place, the project would have a less than significant potential to violate any water quality or waste discharge requirements.

*b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

*LESS THAN SIGNIFICANT.* Project excavation would be less than 25 feet. Because recent historic groundwater levels are deeper than 25 feet, no disturbance or use of groundwater would occur with this project. The project would have a less than significant potential impact to groundwater.

*c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site?*

*LESS THAN SIGNIFICANT.* The project site would be curbed and bermed with a retention basin to hold storm water runoff (Figure B.1-6). There are no drainage courses crossing the site which could be altered. With these features, the Proposed Project would not substantially alter the drainage pattern of the site.

*d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?*

*LESS THAN SIGNIFICANT.* The Proposed Project would not substantially alter the existing drainage pattern. See the discussion under Section B.3.8.2(c) above. Local increase in runoff would be minor due to the small size of the project (approximately two acres) and the provision of an on-site storm water retention basin. With these features, the Proposed Project would not substantially alter the drainage pattern of the site.

*e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems to provide substantial additional sources of polluted runoff?*

*LESS THAN SIGNIFICANT.* The project would not involve any existing storm water drainage systems. Planned or future local storm water drainage would be used, if it is made available by the adjacent development. If the future local storm drainage system is not designed for the runoff from the proposed substation, then runoff would be collected in the on-site retention basin. This impact would be less than significant because any polluted runoff from the site would be contained in the retention basin and by proposed on-site spill prevention controls, as described in Sections B.3.8.2(a) and (c) above.

***f. Would the project otherwise substantially degrade water quality?***

***LESS THAN SIGNIFICANT.*** The Proposed Project would include preparation of a Storm Water Pollution Prevention Plan (SWPPP) that would address best management practices and prevent substantial degradation of water quality. Operation-related impacts would be controlled as described under Sections B.3.8.2(a) and (e) above.

***g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?***

***NO IMPACT.*** The Proposed Project would not place housing within a 100-year floodplain.

***h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?***

***NO IMPACT.*** The Proposed Project would not be within a 100-year floodplain.

***i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?***

***LESS THAN SIGNIFICANT.*** The Proposed Project would be within the dam failure inundation area of Lake Kaweah, approximately 20 miles upstream of the project site. This dam, operated by the Corps of Engineers, is primarily for flood control, although it also provides water supply, recreation, and power components. Given the unlikely possibility of a dam breach, the distance from the site to the dam, the width of the dam breach floodplain at the site (approximately 20 miles), and the fact that the site would be protected by a wall, severe project-related damage and hazard to people from failure of the dam is unlikely, and this impact is considered less than significant.

***j. Would the project cause inundation by seiche, tsunami, or mudflow?***

***NO IMPACT.*** The project area is not subject to inundation by seiche, tsunami, or mudflow.

### B.3.9 Land Use and Planning

#### LAND USE PLANNING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.9.1 Setting

The Proposed Project would be located within the City of Visalia, Tulare County (see Project Description, Figure B.1-1). The proposed substation site and surrounding parcels are presently being used for agricultural, commercial, or residential uses. The proposed substation site would be north of the existing Rector-Oak Grove No. 1 66 kV subtransmission line, and the site would be about 275 feet north of Riggin Avenue. Surrounding land uses are described in more detail in Section B.1.6 of the Project Description.

The Riverway Substation site would be located in an area designated by the Visalia General Plan as Shopping/Office Center, in an area zoned as Planned Shopping/Office Commercial (P-C-SO). The Visalia General Plan describes the Shopping/Office Center designation as being “for a range of neighborhood and community-level commercial and offices uses” (City of Visalia, 1996). The following Visalia General Plan objectives are relevant:

- Objective 2.1.A calls for the preservation and enhancement of “natural and rural features such as waterways, Valley Oaks, and agriculture as significant assets and community resources.”
- Objective 6.3.A calls for the protection of “agricultural land from premature urban development.”

The City of Visalia, however, recognizes the potential conflict between the protection of agricultural land and urban growth, as reflected in its 1991 Statement of Overriding Considerations for the Final Environmental Impact Report for the Visalia Land Use Element, Resolution 91-105. This statement acknowledges that buildout under the Land Use Element would convert approximately 13,000 acres of agricultural land and that mitigation would not reduce the impact to a less than significant level.

The City of Visalia Municipal Code states that the purpose of P-C-SO zoning is to “provide areas for a wide range of neighborhood and community level retail commercial and office uses. The district is intended to provide for the transition from service and heavy commercial uses where they exist in this district to retail and office and to provide areas for neighborhood goods and services where shopping centers may not be available.” The Municipal Code further states for P-C-SO zoning that “all businesses, services and processes shall be conducted entirely within a completely enclosed structure, except for off-street parking . . . electric distribution substation, and recycling facilities.” The Municipal Code lists electric distribution substations as a conditional use in P-C-SO zoning (City of Visalia, 2006).

### B.3.9.2 Environmental Impacts and Mitigation Measures

***a. Would the project physically divide an established community?***

*NO IMPACT.* The proposed Riverway Substation would be located within existing agricultural land in the City of Visalia. Currently, the nearest established community is a residential neighborhood located approximately 300 feet to the south, across Riggin Avenue. New residential housing is planned and being developed, potentially adjacent to the east and northeast of the proposed substation site as well as approximately 300 feet to the west. Because these residential areas would be new, the Proposed Project would not physically divide an established or planned community. Likewise, the project would not physically interrupt any existing or planned roadways or pathways and, therefore, would not divide the planned community.

***b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

*LESS THAN SIGNIFICANT.* The CPUC has exclusive permitting authority regarding SCE's application to build the Riverway Substation, and no local use permit is required. Absent CPUC involvement, this type of project would otherwise be considered a conditional use under the site's land use designation and zoning. Although a discretionary approval is not required from the Visalia Planning Commission, the Proposed Project would not conflict with the City of Visalia's land use designation and zoning for the site.

The conversion of agricultural land under the Proposed Project could potentially conflict with Objectives 2.1.A and 6.3.A of the Visalia Land Use Element. However, the City of Visalia has previously adopted both the Land Use Element and a Statement of Overriding Considerations to address the impact of the conversion of agricultural land in this area. The Proposed Project would conform with the General Plan and the zoning ordinance. Therefore, potential conflicts between the Proposed Project and Objectives 2.1.A and 6.3.A would be less than significant.

***c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

*NO IMPACT.* The project area is not within any applicable habitat conservation plan or natural community conservation plan. Consequently, no impacts would occur.

### B.3.10 Mineral Resources

#### MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.10.1 Setting

The Proposed Project area is currently used for agriculture. The most significant mineral resources in Tulare County are sand, gravel, and crushed stone which are used as sources for aggregate. The major sources for aggregate in the county are alluvial deposits and hard rock quarries (Tulare County, 2007). There are no known important mineral resources in the immediate vicinity, nor are there any active mining operations. A review of the USGS Mineral Resource Data System GIS files (USGS, 2005) indicates there are several past producers of sand and gravel located within two to three miles east and north of the project; however, no active mines or quarries are at or near the project site. A review of the Division of Oil, Gas, and Geothermal Resources website (DOGGR, 2007) indicates that there are no oil, gas, or geothermal fields in the project vicinity.

#### B.3.10.2 Environmental Impacts and Mitigation Measures

**a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?***

**NO IMPACT.** The project area has been used for agriculture for more than 50 years and there are no mapped mineral occurrences, active mines, or oil and gas resources near the project site.

**b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

**NO IMPACT.** The project area has been used for agriculture for more than 50 years and there are no mapped mineral occurrences, active mines, or oil and gas resources near the project site.

### B.3.11 Noise

#### NOISE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.11.1 Setting

##### *Existing Conditions*

**Community Noise.** To describe environmental noise and to assess project impacts on areas that are sensitive to community noise, a measurement scale that simulates human perception is used. The A-weighted scale of frequency sensitivity accounts for the sensitivity of the human ear, which is less sensitive to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. Decibels are logarithmic units that can be used to conveniently compare wide ranges of sound intensities.

Community noise levels can be highly variable from day to day as well as between day and night. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq) or by an average level occurring over a 24-hour day-night period (Ldn). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually one hour. The L50, is the median noise level that is exceeded fifty per cent of the time during any measuring interval. The Ldn, or day-night average sound level, is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to nighttime sounds occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) is another metric that is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m.

Community noise levels are usually closely related to the intensity of human activity. Noise levels are generally considered low when below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. In wilderness areas, the Ldn noise levels can be below 35 dBA. In small towns or wooded and

lightly used residential areas, the Ldn is more likely to be around 50 or 60 dBA. Levels around 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse to public health.

Surrounding land uses dictate what noise levels would be considered acceptable or unacceptable. Lower levels are expected in rural or suburban areas than what would be expected for commercial or industrial zones. Nighttime ambient levels in urban environments are about seven decibels lower than the corresponding daytime levels. In rural areas away from roads and other human activity, the day-to-night difference can be considerably less. Areas with full-time human occupation and residency are often considered incompatible with substantial nighttime noise because of the likelihood of disrupting sleep. Noise levels above 45 dBA at night can result in the onset of sleep interference. At 70 dBA, sleep interference effects become considerable (U.S. EPA, 1974).

**Noise Environment in the Project Area.** Noise levels in the project area depend on the proximity of occupied and developed uses. The Proposed Project site is surrounded by agricultural and open space uses, with a residential neighborhood located approximately 300 feet to the south across Riggins Avenue. These provide low ambient noise levels of the area because the site is approximately 300 feet away from roads and occupied uses. As future development surrounds the site, including traffic on Ranch Circle Drive, future noise levels would be higher than in the current conditions. Noise levels measured in 2006 at several locations on and around the project site as well as at the closest receptor to the south of Riggins Avenue ranged from 51.7 dBA L50 to 54.4 dBA L50 in the daytime and from 38.8 dBA L50 to 47.2 dBA L50 at night (Veneklasen 2006).

**Noise Sensitive Areas.** Noise sensitive receptors are residences, schools, religious facilities, hospitals, and parks. Open space is considered noise sensitive if it is used for passive, rather than active, recreation. Single family residences are currently located approximately 300 feet south of the project site, across Riggins Avenue. In the future, new residential development is planned for construction within 30 feet of the north and east property lines of the substation; however, it is currently unclear as to precisely how close the nearest home would be placed. The proposed TSP riser and southern end of the underground subtransmission line would be located at the intersection of Riggins Avenue and Mooney Boulevard, which is approximately 120 feet from the closest existing residence.

### ***Applicable Regulations***

Regulating environmental noise is generally the responsibility of local governments. The U.S. EPA once published guidelines on recommended maximum noise levels to protect public health and welfare (U.S. EPA, 1974), and the State of California maintains recommendations for local jurisdictions in the General Plan Guidelines published by the Governor's Office of Planning and Research (OPR, 2003). The following summarizes the local requirements.

**Tulare County General Plan.** The Tulare County General Plan is currently being updated. The updated General Plan will include a Noise Element that would establish baseline levels for use in the development of enforcement of a noise control ordinance (Tulare County, 2007). Because the project would be in the jurisdiction of the City of Visalia, the Visalia Noise Ordinance (see below) would apply to all project-related activities.

**City of Visalia General Plan.** The objectives for controlling community noise outlined in the General Plan include maintaining noise below 65 CNEL at the outdoor spaces of building exteriors and below 45 CNEL within interior living spaces (Visalia, 1995, Noise Element Section 3.4). The policies specify



preventing encroachment of incompatible land uses near known noise producing industries, railroads, airports, and other sources as well as protecting existing and future noise-sensitive land uses from encroachment of and exposure to excessive levels of noise. Policies for reducing noise include site and building design, setbacks, walls and barriers, landscaping, and special building materials and systems. The City of Visalia General Plan Noise Element does not specify mitigation requirements specifically for noise reduction during construction activities.

**City of Visalia Code of Ordinances.** The City of Visalia Code of Ordinances (Section 8.36.070) requires that noise from electrical substations shall not exceed 50 dBA when measured within 50 feet of a sensitive receptor. The code also restricts construction noise so that construction equipment cannot be used on properties abutting noise sensitive land uses between the weekday hours of 7:00 p.m. and 6:00 a.m. and between the weekend hours of 7:00 pm and 9:00 a.m. The City of Visalia does not regulate groundborne vibration.

### B.3.11.2 Environmental Impacts and Mitigation Measures

- a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED DURING CONSTRUCTION.* Construction of the project would involve short-term use of numerous trucks, bulldozers, graders, compactors, pavers, booms, cranes, drills, compressors, generators, and other equipment primarily at or around the proposed substation site. Construction at the proposed Riverway Substation site would occur within 300 feet of the nearest sensitive receptors. Trenching equipment to install the underground subtransmission line would be used within 120 feet of the nearest existing sensitive receptor. All substation construction traffic, including deliveries of transformers and tower components would occur along the access road, potentially passing by the nearest homes along Riggin Avenue. Noise levels for typical pieces of construction equipment (at 50 feet) that would be used are listed in Table B.3.11-1.

All construction activities, including those for the proposed substation site and installation of the underground subtransmission lines, telecommunication facilities, and any staging areas, would create both intermittent and continuous noises. Intermittent noise would result from periodic, short-term equipment operation, such as cranes for positioning equipment or drilling rig use during foundation work for the riser pole. Continuous noise would result from steady equipment operation over longer periods, such as mixer or generator use. The maximum intermittent construction noise levels would range from 80 to 90 dBA at 50 feet from an active construction area. Sound from stationary sources decreases by six dBA with every doubling of distance from the source.

Table B.3.11-1. Typical Noise Levels for Construction Equipment

Equipment	Typical Noise Levels (dBA, at 50 feet)
Front loaders	85
Backhoes, excavators	80-85
Tractors, dozers	83-89
Graders, scrapers	85-89
Trucks	88
Concrete pumps, mixers	82-85
Cranes (movable)	83
Cranes (derrick)	88
Forklifts	76-82
Pumps	76
Generators	81
Compressors	83
Pneumatic tools	85
Jack hammers, rock drills	98
Pavers	89
Compactors	82
Drill rigs	70-85

Sources: Adapted from U.S. EPA, 1972 / U.S. DOT, 1995.

The nearest residential properties to the project site are 300 feet away. At this distance, noise levels from construction activities as the project site would be attenuated to approximately 65 to 75 dBA. However obstacles such as trees, existing buildings, and construction equipment in the path of the sound waves would attenuate the levels to an even lower level. As stated above, construction activities associated with installation of the subtransmission line would also occur at the intersection of Riggin Avenue and Mooney Boulevard within approximately 120 feet from the nearest residence. These activities would be temporary and generally more intense to the north toward the project site, farther away from the sensitive receptors. Although noise from equipment would attenuate with distance, activities for underground subtransmission line installation and heavy truck traffic entering the site could result in a intermittent peak noise levels of approximately 80 dBA at the nearest sensitive receptor. Existing ambient noise levels in this area are 54 dBA during the daytime. Therefore, noticeable noise increases would occur in nearby residential areas temporarily during construction.

Construction would also cause noise off site, primarily from commuting workers and from trucks needed to bring materials to the substation site. The peak noise levels associated with passing trucks and commuting worker vehicles would be approximately 70 to 75 dBA at 50 feet, and would be concentrated along the major arterial streets, especially Riggin Avenue and the future Mooney Boulevard and Ranch Circle Drive leading to the substation site.

Construction of the substation would adhere to the noise ordinance provisions set by the City of Visalia, which permit construction activity near sensitive noise receptors between the weekday hours of 6:00 a.m. and 7:00 p.m. and between the weekend hours of 9:00 a.m. and 7:00 pm. This would be consistent with local policies, which would minimize the likelihood of construction noise complaints. Construction activities that would occur during the daytime would not cause a violation of the local standards. It may be necessary to perform certain construction activities, particularly during cut over activities, during nighttime hours when loads on the transmission lines are reduced. Should the need to work outside the time permitted in the local ordinance, SCE would need to request and obtain a variance from the City of Visalia.

Noise from construction activities would be short-term and temporary in nature and would vary from day to day depending on specific construction activities. In order to ensure that all construction activities, especially equipment and vehicle noise, comply with local ordinances and standards, Mitigation Measures N-1 and N-2 should be implemented to reduce noise from vehicles and construction traffic. Considering the short-term and temporary nature of the construction activities and the recommended mitigation measures, noise impacts during construction would be less than significant.

#### ***Mitigation Measures for Construction Noise***

- N-1 Properly minimize construction vehicle noise.** SCE shall maintain mufflers in accordance with equipment vendor specifications on all internal combustion and vehicle engines used in construction.
- N-2 Avoid unnecessary construction traffic noise.** Where feasible, construction traffic shall be routed to avoid noise-sensitive areas, such as residences, schools, religious facilities, hospitals, and parks.

***LESS THAN SIGNIFICANT DURING OPERATION.*** For long-term noise impacts associated with operations of the Proposed Project, refer to Section B.3.11.2(c), below.

***b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

*LESS THAN SIGNIFICANT.* Vibration from construction equipment and activities might be perceptible to receptors in the immediate vicinity of construction activities. Tamping of ground surfaces, the passing of heavy trucks on uneven surfaces, and rock drilling would each create perceptible vibration in the immediate vicinity of the activity. SCE would not perform any blasting to grade the substation site. The level of groundborne vibration that could reach sensitive receptors depends on the distance to the receptor, what equipment is creating vibration, and the soil conditions surrounding the construction site. The impact from construction-related groundborne vibration would be short-term and confined to only the immediate area around the activity (within about 25 feet). As all proposed construction activities would be more than 25 feet from any occupied structure, the impact would be less than significant.

***c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

*LESS THAN SIGNIFICANT.* The permanent noise sources that would occur with the project are limited to transformer operation at the substation and noise from crews conducting routine inspection and maintenance of the substation.

Substations usually generate steady noise from the process of power conversion and the operation of transformers and auxiliary equipment needed to cool the transformer. Transformer noise contains pure-tone or “hum” components. This tonal quality is typically the most offensive characteristic of transformer noise. Auxiliary equipment includes cooling fans and oil pumps that operate depending on the internal temperature of the transformer oil. With all auxiliary cooling fans operating, the worst-case noise level from the transformers at full load is predicted to be no more than 66 dBA at three feet away from the equipment (SCE, 2006).

As depicted in the Project Description, Figure B.1-6, the transformer would be located approximately 60 feet from the 8-foot block wall along the eastern and western sides of the substation site. Considering that a six dBA decrease of sound occurs with every doubling of distance from the source, transformer noise would be attenuated to approximately 40 dBA 60 feet from the source. The 8-foot block wall that would be constructed around the substation would provide noise attenuation of about 10 dBA, so that the transformer noise level outside the wall would be approximately 30 dBA.

Future residences may be built adjacent to the substation property lines. The property line of the substation site along the eastern boundary of the site would be located 40 feet from the block wall. This additional distance would further attenuate transformer noise by two dBA. Therefore, the level of operational noise expected to be heard at the eastern and western property lines of the substation site is expected to be approximately 30 dBA or lower. Background noise in the area was measured to be between 51.7 and 54.4 dBA in the daytime and between 38.8 to 47.2 dBA at night. With these background levels, operational noise from the substation would not be noticeable or a nuisance.

The precise orientation of future residences near the proposed substation site is not known, but homes east or west of the substation are expected to be set back by some distance from the substation wall. If residences are developed immediately adjacent to the proposed substation wall, the upper stories could have an unobstructed line-of-sight over the block wall into the substation. Off-site noise levels would be 10 dBA higher at upper level locations because the wall would provide no benefit. The level of operational noise experienced by the upper level of an adjacent two-story house would be approximately 40 dBA. This level would not be considered a substantial increase because it would be similar to the exist-

ing nighttime noise levels, which are compatible with residential use. Future homes near the northern and southern boundaries of the substation site would experience lower levels of operational noise because additional setbacks would be likely.

The level of operational noise from the substation that would occur at the existing residences south of Riggan Avenue is expected to be approximately 15 dBA, which would not be audible given the existing background conditions. As such, a substantial increase in ambient noise levels would not occur at existing or future residences due to substation operation.

Routine inspection and maintenance of the Proposed Project would be accomplished through periodic visits to the substation site. Visits to the substations would not normally involve a large crew. Additional noise produced at the substation may occur during activation of circuit breakers. Because each of these noise sources would be infrequent and isolated, no substantial noise increase would occur.

There are no sources of noise associated with the operation of underground subtransmission lines, and therefore no noise impacts are anticipated to occur from the subtransmission line.

***d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

***LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.*** Noise impacts associated with construction would mainly affect those receptors closest to construction access routes. Existing homes along Riggan Avenue and any future homes built along Mooney Boulevard and Ranch Circle Drive would experience a temporary increase in noise above levels now existing without the project. The increase would not be substantial for existing homes because of the distance involved, and for future homes that could be developed near the project site, the short-term and intermittent nature of construction noise would limit the impacts. Compliance with the Visalia noise ordinance and Mitigation Measures N-1 and N-2 would reduce the effects of noise caused by construction vehicles and traffic to levels that would not be substantially over levels existing without the project. With the mitigation, impacts would be less than significant.

***e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

***NO IMPACT.*** The Proposed Project would not be located within two miles of a public airport or within an airport land use plan. No feature of the project would expose people in the project area to excessive noise from aircraft.

***f. For a project within the vicinity of a private air strip, would the project expose people residing or working in the project area to excessive noise levels?***

***NO IMPACT.*** The Proposed Project is not located within the vicinity of a private airstrip.

### B.3.12 Population and Housing

#### POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.12.1 Setting

The population and housing study area for the Riverway Substation project includes the City of Visalia in Tulare County. U.S. Census Year 2000 data for population, housing, and employment for the City of Visalia and Tulare County are presented in Table B.3.12-1.

Table B.3.12-1. Year 2000 Existing Conditions – Population, Housing, and Employment: City of Visalia and Tulare County

Location	Population	Housing Units		Employment	
		Total Units	Vacancy Rate	Total Employed <sup>1</sup>	In Construction Trades
City of Visalia	91,565	32,654	1.3% Owner 2.4% Rental	65,741	2,868
Tulare County	368,021	119,639	1.1% Owner 2.2% Rental	257,320	11,296

<sup>1</sup> Accounts for population greater than 16 years of age and in Labor Force  
Source: U.S. Census, 2000.

#### B.3.12.2 Environmental Impacts and Mitigation Measures

**a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**NO IMPACT.** Construction activities resulting from project implementation would be considered short-term and temporary. As shown in Table B.3.12-1, Tulare County contains a considerable construction workforce (11,296 persons in Construction Trades). The Proposed Project would require up to about 25 construction workers. It is assumed that these construction personnel would come from within Tulare County or adjacent areas and would generate neither a permanent increase in population levels nor a decrease in available housing. No impacts to existing or future population growth levels would occur as a result of construction of the Proposed Project.

Operation of the proposed substation would be automated, requiring no additional employees. No direct population growth would be induced because, for example, the Proposed Project would not involve the construction of housing. Because no new homes or jobs would occur, implementation of the project would generate no direct increase in the permanent population of the area.

The purpose of the Proposed Project is to improve reliability and meet projected electrical load requirements in the Tulare County area (SCE, 2006), which is rapidly growing. Development and growth depend on reliable electrical infrastructure, but electric service is not a differentiating factor that affects growth because SCE is required by federal and CPUC rules to provide service to customers. While SCE would

meet existing and future electrical demand with the Proposed Project, it would not induce population growth either directly or indirectly. Thus, no impacts associated with induced population growth would occur.

***b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

*NO IMPACT.* No residential properties currently exist within the proposed substation site or within the corridor of the 1,200 feet of proposed underground subtransmission lines. No housing or persons would be displaced by the project. Therefore, implementation of the Proposed Project would not result in the displacement of any housing, including affordable housing, nor would it necessitate the construction of replacement housing. No impacts would occur.

***c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?***

*NO IMPACT.* As stated in Section B.3.12.2(b) above, there is no existing housing within the proposed substation site or subtransmission corridor. Therefore, the project would not result in the displacement of people, nor would it necessitate the construction of replacement housing elsewhere. No impacts would occur.

### B.3.13 Public Services

#### PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.13.1 Setting

The community and local municipalities supervise fire and police departments as well as school districts, parks and recreational areas, and other public services. Table B.3.13-1 lists applicable public service providers by jurisdiction.

Table B.3.13-1. Service Providers

**Fire protection** – City of Visalia Fire Department; Stations Serving the City of Visalia - Station 1 (309 S. Johnson St.), Station 2 (2224 W. Monte Vista), Station 3 (9500 W. Airport Dr.), Station 4 (440 W. Ferguson)

**Police protection** – City of Visalia Police Department

**Hospitals** – Kaweah Delta District Hospital

**Schools** – Visalia Unified School District

Sources: Visalia Fire Department, 2007; Kaweah Delta Health Care District, 2007; Visalia Unified School District, 2007; Visalia Police Department, 2006.

#### B.3.13.2 Environmental Impacts and Mitigation Measures

***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

##### a) *Fire protection?*

**LESS THAN SIGNIFICANT.** The City of Visalia Fire Department provides fire protection to the project area. Multiple fire stations serve the project area, as identified in Table B.3.13-1. Construction activities are not anticipated to increase the demand for fire protection services in a way that would result in the need for new or altered facilities. Fire risk would be not greater than at any other construction site. Following construction, operation of the substation could result in instances requiring fire protection services. However, the California Fire Code and Uniform Building Code require the Proposed Project to include fire protection features, including unobstructed access, shown in the Project Description, Figure B.1-6. Fire risk would be comparable to that from other existing electrical infrastructure in the area, and this would not create the need for new or physically altered fire protection facilities. The substation would not affect the ability of fire personnel to respond to fires, nor affect response time or other service performance. The Proposed Project would have less than significant impacts with regard to fire protection facilities.

***b) Police Protection?***

*LESS THAN SIGNIFICANT.* The City of Visalia Police Department provides police protection to the project site and the surrounding area. Construction activities are not anticipated to increase the demand for police protection services in the area. The Proposed Project would include a wall and barbed wire fencing for security, which would help reduce the demand for police protection. As with fire services, the construction and operation of the substation would not result in a need for additional police facilities nor would it affect response times or other service performance. The result would be a less than significant impact with regard to police protection.

***c) Schools?***

*NO IMPACT.* Construction of the Proposed Project would require about 25 workers during peak activity. These construction personnel would likely commute to the site from within Tulare County or nearby counties and would not create a permanent change in local population. Upon completion, the proposed substation would be automated and require no additional SCE employees for operation. Since the Proposed Project would not increase the local population, no increase in demand for school facilities would occur, and no new school facilities would be required.

***d) Parks?***

*NO IMPACT.* As described in Section B.3.13.2(c) above regarding schools, the Proposed Project would not increase the region's population. Consequently, the project would not increase any long-term demands on existing parks in the project area, and no new or expanded park facilities would be required because of the Proposed Project. See Section B.3.14, Recreation, for a complete discussion the Proposed Project's potential impacts to parks and other recreational facilities.

***e) Other Public Facilities?***

*NO IMPACT.* The Proposed Project would not increase population and would not affect other governmental services or public facilities so as to require new or expanded facilities be developed. Therefore, no impact on other public facilities is expected.



### B.3.14 Recreation

#### RECREATION

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.14.1 Setting

The Proposed Project would occur within the City of Visalia on property that is presently being used for agriculture. No recreational facilities exist within one-half mile of the Proposed Project. The nearest existing city park is Fairview Village Park located approximately 0.84 miles to the southeast. The City of Visalia's Woodland Park is approximately 0.95 miles southwest of the project site (City of Visalia Offices Park & Recreation, 2007).

#### B.3.14.2 Environmental Impacts and Mitigation Measures

***a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

***NO IMPACT.*** In general, an increase in use of existing recreational facilities could be spurred by population growth, which increases use of existing recreational resources. Such a demand on these resources could result in the physical deterioration of the facilities. However, as demonstrated in Section B.3.12, Population and Housing, the Proposed Project is not expected to induce either short-term or long-term population growth, either during project construction or operation. As such, there would be no impact to recreational facilities because there would be no increased need for recreational resources.

***b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

***NO IMPACT.*** The Proposed Project does not include recreational facilities, nor does it require the construction of new facilities or the expansion of existing facilities recreational facilities. As such, no adverse physical effects on the environment would be generated by recreational facilities resulting from the Proposed Project.

### B.3.15 Transportation/Traffic

#### TRANSPORTATION AND TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.15.1 Setting

The Proposed Project would be located away from the existing roadway network but would be accessed by the future Ranch Circle Drive off of the extension of North Mooney Boulevard, north of West Riggin Avenue. Figure B.1-1 of the Project Description depicts the existing streets and roadways in the project vicinity.

##### *Highways*

Regional access to the project area is provided by State Route 99 (SR 99) and State Route 198 (SR 198), located six miles and two miles from the project site, respectively. The major north-south access is provided by SR 99 connecting to Bakersfield and Los Angeles to the south and Fresno and Sacramento to the north. The major east-west access is provided by SR 198, as it extends from Interstate 5 and SR 101 to the west and Farmersville, Exeter, and Sequoia National Park to the east.

##### *Arterial Roads*

Demaree Street, also known as County Road 108, connects Visalia to the City of Tulare approximately 10 miles to the south. Dinuba Boulevard, located 0.8 mile east of the project site, serves as the alignment of SR 63 north of Visalia and provides access to the northwest portions of Tulare County. North Mooney Boulevard, which borders the project site to the west, is classified as an arterial from Riggin Avenue south to Goshen Avenue. South Mooney Boulevard is classified as a major arterial between Main Street and Avenue 272. Riggin Avenue is an east/west arterial in the northern region of Visalia and is less than 300 feet from the project site. The City of Visalia plans to upgrade and widen Riggin Avenue to a four-lane divided roadway from the western city boundary (near SR 99) to Dinuba Boulevard east of the proposed site. This work has already begun and is scheduled to be completed by 2010 (City of Visalia, 2007).

Table B.3.15-1 lists existing daily average traffic volumes for highways and arterials roads that could be affected by the Proposed Project.

***Existing Conditions***

Level of Service (LOS) defines the performance of a roadway based on traffic volumes compared to the roadway’s capacity. Classifications of LOS range from A, which is unrestricted free-flow conditions, to LOS F which represents highly restricted forced-flow conditions. The City of Visalia’s policy is to plan for LOS D for street segments and intersections (City of Visalia, 2001). This means that the City’s goal is to operate all roadways at LOS D or better. Therefore, a project’s contribution to traffic would not be considered a significant impact if the resulting traffic is classified as LOS D or better (City of Visalia, 2007).

Table B.3.15-1 lists the capacity and existing LOS for highways and arterials roads that could be affected by the Proposed Project.

**Table B.3.15-1. Average Daily Traffic Volumes (ADT) Without Proposed Project**

Roadway	Lanes	Classification	Jurisdiction	ADT	Maximum Capacity for LOS C	LOS
Riggin Avenue	2	Arterial	City of Visalia	5,000	17,800	B
North Mooney Boulevard, north of Goshen Avenue	2	Arterial	City of Visalia	7,000	17,800	C
South Mooney Boulevard, south of Main Street	4	Major Arterial	City of Visalia	22,000	35,900	C
Demaree Street, north of Goshen Avenue	2	Arterial	City of Visalia	14,500	17,800	B/C
Dinuba Boulevard (SR 63)	2	Arterial	Caltrans	17,000	17,800	C
State Route 99	4	Highway	Caltrans	47,000	67,400	C
State Route 198	4	Highway	Caltrans	61,000	60,000	B

Source: SCE, 2006; Caltrans, 2006; City of Visalia, 2007.

***Mass Transit***

The Visalia City Coach transit system provides bus service to residents within Visalia. Near the project area, there is one bus stop located at the intersection of Riggin Avenue and North Giddings Street approximately 0.3 miles west of the project site (Visalia City Coach, 2006). Bus Route 7 provides daily service to this location from 6:18 a.m. to 9:18 pm. Bus Route 7 travels north along Dinuba Boulevard, west on Riggin Avenue, and south on Mooney Boulevard.

***Rail***

There is no commuter rail service in the City of Visalia; however, Amtrak provides bus connections to and from the Hanford Station from the Visalia Station located at 425 East Oak Avenue, approximately two miles southeast of the project site (Amtrak, 2007).

***Bicycle***

Bicycle paths, bicycle lanes, and sidewalks provide safe routes for non-motorized transport. The City of Visalia adopted a citywide Bikeway Plan in 1993 and incorporated it into the Circulation Element of its general plan. There are several existing Class I (separate, multi-use trails or paths) and Class II (striped

bicycle lanes on roadways) bicycle facilities within the City of Visalia, however no designated bike lanes currently exist within the immediate vicinity of the project site or along the roadway segments where proposed construction activities would occur (City of Visalia, General Plan).

### ***Air Transportation***

The Visalia Airport is the nearest airport to the Proposed Project, located approximately four miles to the southwest. Sequoia Field is another public airport located approximately six miles north of the project site.

### ***Permits and Approvals Necessary***

**California Department of Transportation.** SCE would need to apply for and obtain a Caltrans Transportation Permit for movement of vehicles that may qualify as an oversized or excessive load or for transportation of oversized or excessive loads. This permit would determine a specific route for the shipper to follow from origin to destination.

**Local Agencies.** SCE would need to apply to each Tulare County and the City of Visalia for transportation permits allowing movement of oversized or excessive loads. An encroachment permit for temporary positioning of oversized vehicles that may obstruct traffic on through roads may also be needed in order to deliver equipment or materials to the project site.

## **B.3.15.2 Environmental Impacts and Mitigation Measures**

- a. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

***LESS THAN SIGNIFICANT.*** The Proposed Project would contribute to traffic congestion by adding truck trips and worker commute trips during construction. Construction vehicles and workers would reach the proposed site via the temporary access road or future Ranch Circle Drive from the extension of North Mooney Boulevard, which connects to Riggan Avenue. Riggan Avenue provides access to SR 198 via SR 63 (Dinuba Boulevard). These State Routes are the nearest designated truck routes. Goshen Avenue to the southwest of the project site is the nearest designated truck route that provides direct access to SR 99. SCE proposes to use these designated truck routes to access the site (APM Traffic-3).

The peak level of estimated truck trips would occur during import of fill material during grading. This activity would require about 140 round-trip truck trips (280 total trips) throughout a four week period. Additional trucks would be needed to bring equipment, hardware, and other building materials (such as concrete) to the work site. In addition to the project truck trips, construction workers could generate up to 100 trips per day by commuting to the work site each workday.

An unlikely worst case scenario of *all* 140 round-trip truck trips occurring on one single day with worker commute trips would result in 380 one-way project-related trips on local roadways. This traffic increase under this unlikely scenario would be approximately 7.6 percent over the existing daily traffic along Riggan Avenue, and an increase of less than six percent on any other potentially affected roadway.

As shown below in Table B.3.15-2, the worst case maximum of 380 additional daily trips would not cause any of the project roadways to exceed its maximum LOS C capacity, and therefore, this traffic increase would not cause any roadway to deteriorate to LOS D or worse. The actual daily increase in traffic volume would be much lower during the twelve month construction period than the maximum daily shown here.

Table B.3.15-2. Average Daily Traffic Volumes (ADT) With Proposed Project

Roadway	LOS	ADT	Maximum Daily Construction Trips	ADT + Construction Trips	ADT Increase (percent)	Maximum Capacity for LOS C
Riggin Avenue	B	5,000	380	5,380	7.6%	17,800
North Mooney Boulevard, north of Goshen Avenue	C	7,000	< 380	7,380	5.4%	17,800
South Mooney Boulevard, south of Main Street	C	22,000	< 380	22,380	1.7%	35,900
Demaree Street, north of Goshen Avenue	B/C	14,500	< 380	14,880	2.6%	17,800
Dinuba Boulevard (SR 63)	C	17,000	< 380	17,380	2.2%	17,800
State Route 99	C	47,000	< 380	47,380	0.8%	67,400
State Route 198	B	61,000	< 380	61,380	0.6%	60,000

Source: SCE, 2006; Caltrans, 2006; City of Visalia, 2007.

Temporary traffic slowdowns may occur while large slow moving equipment is moved over public roadways to the site access road. SCE anticipates that the majority of such traffic would avoid peak hours. Heavy transport vehicles (60-ton capacity) would be used to deliver transformers to the substation site, and a traffic control service would be required for transformer delivery. By law, the heavy loads would require SCE to obtain transportation permits from the local jurisdictions and Caltrans. Some of the stipulations of each transportation permit would designate the haul routes to be taken and require SCE to repair any damage caused to any restricted load limit streets. SCE proposes to use off-peak hours when possible (APM Traffic-1) and stagger trips throughout the four week period of grading (APM Traffic-2). With these procedures in place, congestion and potential roadway damage caused by project-related truck traffic would cause adverse, but less than significant impacts.

During construction of the subtransmission lines and fiber optic cable installation, periodic single lane closures of Riggin Avenue or Mooney Boulevard (north of Riggin Avenue) may be necessary and could have an effect on traffic along these routes. If lane closures are required, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee 1996) (APM Traffic-4). Compliance with these practices would also minimize the overlapping construction-related traffic effects of the City's Riggin Avenue expansion.

Summarizing, the increase in traffic that would occur due to construction activities and worker vehicles accessing the work site would not be substantial in relation to the existing traffic load and capacity of the street system, and construction effects would be limited to a short-term duration. During operation of the proposed substation, work crews would only visit the substation two to three times per week for routine maintenance. As such, the permanent increase in traffic would not be substantial, and this impact would be less than significant.

***b. Would the project cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded?***

***LESS THAN SIGNIFICANT.*** Construction of the Proposed Project would cause a minor short-term increase in the local traffic throughout the project study area (see discussion above). As stated in Section B.3.15.2(a) and shown in Table B.3.15-2 above, project-related traffic would result in relatively small increase when added to the existing daily traffic on freeways and arterial roadways. The Proposed Project would not

increase traffic to a level that is substantial in relation to the existing traffic load and capacity of the street system for roads in the project area. Therefore, it is not anticipated that the temporary construction traffic generated by the Proposed Project would alter the project area roadway's existing level of service designations, and level of service standards would not be exceeded. Operation of the Proposed Project would only require routine inspection and periodic maintenance visits, which would not cause level of service standards to be exceeded. The result would be less than significant impacts on level of service.

***c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

***NO IMPACT.*** No operating airports or heliports are within two miles of the Proposed Project. Helicopters would not be used during project construction. Therefore, the Proposed Project would not include any features that would disrupt or affect air traffic. As such, there would be no impacts to air traffic patterns.

***d. Would the project substantially increase hazards because of a design feature or incompatible uses?***

***LESS THAN SIGNIFICANT.*** Addition of one 85-foot tall Tubular Steel Pole (TSP) riser near the northeast corner of Riggan Avenue and Mooney Boulevard would occur in an existing utility pole alignment, and the new pole would be placed according to local requirements. This would not increase any transportation-related design hazards or involve incompatible uses. No other features could have the potential to increase traffic hazards in the area. Therefore, the Proposed Project would not increase hazards on area roadways due to a design feature or incompatible uses.

***e. Would the project result in inadequate emergency access?***

***LESS THAN SIGNIFICANT.*** Construction of the Proposed Project would not result in closures of any local roads, except for occasional transport of heavy or oversized equipment to the site under the terms of transportation permits and lane closures for construction of underground facilities. Brief closures would not adversely affect emergency access because SCE would need to coordinate these activities with the City of Visalia and implement established traffic control measures (APM Traffic-4). This would ensure that provisions are made for adequate emergency access, and that impacts on emergency access would be less than significant.

***f. Would the project result in inadequate parking capacity?***

***NO IMPACT.*** The Proposed Project would not occur within any parking lots, and it would not affect street parking on roadways. Construction workers would park in a designated area at the proposed substation site, away from public parking. Operation of the proposed Project would not create a need for parking outside of the substation site. Therefore, there would be no impact to parking.

***g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?***

***NO IMPACT.*** Construction traffic would occur on roadways that support bus routes and bicycle facilities along with other traffic. However, because the Proposed Project would not physically alter or change any alternative transportation facilities, the Proposed Project would not conflict with adopted policies, plans, or programs that support alternative transportation in the project area.

### B.3.16 Utilities and Service Systems

#### UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

#### B.3.16.1 Setting

Utility and service system facilities associated with electricity, domestic (potable) water, stormwater, solid waste, communications, and natural gas are provided and maintained by a variety of local purveyors, including cities, counties, special districts, water agencies, and private companies. Utilities such as domestic water, wastewater and stormwater sewers, and natural gas are usually transmitted via underground pipelines or conduits. Electrical and telecommunication services can be installed underground or overhead on utility poles. Most urban utility and public service infrastructure exists within public rights of way.

The new substation and underground subtransmission lines would be located within the City of Visalia. Table B.3.16-1 lists applicable utility providers here.

Table B.3.16-2 lists the total and remaining capacities of solid waste processors serving the City of Visalia.

**Table B.3.16-1. Utility Providers**

**Natural gas** – Southern California Gas Company  
**Electricity** – SCE  
**Water** – California Water Service Company  
**Wastewater** – City of Visalia  
**Telephone** – AT&T/Pacific Bell  
**Solid Waste** – City of Visalia Public Works, Tulare County Resource Management Agency  
*Landfills Used:* Visalia Landfill, Woodville Landfill, Teapot Dome Landfill

Sources: City of Visalia, 1996 and 2007; Tulare County, 2005.

Table B.3.16-2. Landfill Capacities

Landfill Name	Total Capacity (cu.yd.)	Remaining Capacity (cu.yd.)	Remaining Capacity (percent)	Maximum Throughput (tons/day)
Visalia Landfill	18,630,666	16,145,591	87	2,000
Woodville Landfill	11,924,450	6,970,183	58	1,078
Teapot Dome Landfill	6,546,407	998,468	15	600

Source: California Integrated Waste Management Board, 2007.

### B.3.16.2 Environmental Impacts and Mitigation Measures

**a. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

**LESS THAN SIGNIFICANT.** The project area is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). Currently, the site is undeveloped with agricultural use and generates no wastewater. Minimal wastewater would be generated by workers during project construction, and it would not adversely affect the treatment plant that would receive the wastewater. The construction-related increase in wastewater would be temporary and represent a very small fraction of the permitted flow for the wastewater treatment capability within the City of Visalia. Upon completion of construction, the Proposed Project would not generate wastewater because the proposed substation would be an automated facility. The volume and quality of project wastewater would not exceed the treatment requirements of the RWQCB, and this impact would be less than significant.

**b. *Would the project require, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

**LESS THAN SIGNIFICANT.** The Proposed Project would generate minimal water demand or wastewater. Existing wastewater and water treatment facilities are adequate to accommodate the demand generated by the Proposed Project (Section B.3.16.2(a) and (d)). Upon completion of construction, the Proposed Project would not generate a significant demand for water or wastewater treatment, as the proposed substation would be an unstaffed, automated facility. Thus, the project would not require or result in the construction or expansion of water or wastewater treatment facilities, and this impact would be less than significant.

**c. *Would the project require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

**LESS THAN SIGNIFICANT.** Construction of the Proposed Project could temporarily accelerate sedimentation and reduce surface water quality by disturbing the immediate area of the substation. Stormwater drainage features of the proposed substation, along with the construction best management practices (BMPs), would manage project-related stormwater without using off-site facilities. Storm water would drain either to the local storm drain system or a fenced retention basin on the east side of the substation property, depending on the availability of the storm system in the future Ranch Circle Drive. Because no new or expanded drainage facilities would be required for the project, this impact would be less than significant.



***d. Would the project have sufficient water supplies available to serve the Proposed Project from existing entitlements and resources, or would new or expanded entitlements be needed?***

***LESS THAN SIGNIFICANT.*** The Proposed Project area is not currently served by any water main or permanent water line. It is expected that eventually a connection to the municipal water system would be established for landscaping, assuming it is extended as part of a future adjacent development. During construction, water would also be required for dust suppression and cleaning of construction equipment. Water for construction uses would come from a truck filled from the municipal water system (California Water Service Company). The magnitude of the demand for water for dust control is not known. However, the amount of water for dust suppression during construction is considered to be minimal in comparison to available municipal water supplies, and water use for construction would be temporary. Upon completion of construction, the Proposed Project would cause minimal daily water demand, resulting only from landscaping irrigation needs at the proposed substation. Therefore, the Proposed Project would not be expected to exceed the existing water supplies available to serve the Proposed Project, and this impact would be less than significant.

***e. Would the project result in a determination by the wastewater treatment provider that serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?***

***LESS THAN SIGNIFICANT.*** The Proposed Project would generate minimal wastewater during construction. As discussed in Section B.3.16.2(a) above, existing wastewater facilities would adequately accommodate the minor demand caused by project construction while serving existing commitments. Therefore, this impact would be less than significant.

***f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs?***

***LESS THAN SIGNIFICANT.*** A private contractor would collect and transport any construction-related solid waste. The waste of the cleared walnut trees, roots, and topsoil would be removed to a local landfill, for potential use as cover material, or to another site for use as mulch or fill. Small amounts of construction debris would be related to use of building materials (such as concrete and metal). Debris would be disposed of at one of the local landfills identified in Table B.3.16-1. Total solid waste generated by construction of the Proposed Project is anticipated to be minor and within the capacity of existing landfills serving the project area. Therefore, the impact of solid waste disposal would be less than significant.

***g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?***

***NO IMPACT.*** The California Integrated Waste Management Act of 1989, which emphasizes resource conservation through reduction, recycling, and reuse of solid waste guide solid waste management requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE). The Proposed Project would operate in accordance with these applicable Solid Waste Management Policy Plans by including recycling activities. As identified in Section B.3.16(f) above, landfills serving the site would have sufficient capacity to accommodate project construction solid waste disposal needs, and project solid waste disposal would not require the need for new or expanded landfill facilities. Therefore, the Proposed Project would comply with federal, State, and local statutes and regulations related to solid waste disposal limits and landfill capacities. No impact would occur.

### B.3.17 Mandatory Findings of Significance

#### MANDATORY FINDING OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ( <i>Cumulatively considerable</i> means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.** As described in Section B.3.4, Biological Resources, the project could result in impacts to habitats that support sensitive species. However, implementation of the Applicant Proposed Measures and Mitigation Measure B-1 described in Section B.3.4 would reduce these potential impacts to less than significant levels. Similarly, Section B.3.5, Cultural Resources, shows that the project would have a less than significant impact to important examples of the major periods of California history or prehistory.

With the suggested mitigation, the Proposed Project would not have a significant adverse effect on natural resources, either by itself or cumulatively with other projects. No significant impacts would occur that could not be mitigated to a less than significant level.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)**

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.** CEQA defines a cumulative impact as an effect that is created as a result of the combination of the Proposed Project together with other projects (past, present, or future) causing related impacts. Cumulative impacts of a project need to be evaluated when the project’s incremental effect is cumulatively considerable and, therefore, potentially significant.

As discussed in preceding Sections B.3.1 through B.3.16, many of the potential impacts of the Proposed Project would occur during construction, with few lasting operational effects. Because the construction-related impacts of the Proposed Project would be temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close

proximity. Construction impacts caused by the Proposed Project (primarily related to air quality, biological resources, noise, and traffic) could combine with similar effects of other projects being built in this rapidly developing area. To ensure that the incremental construction-phase effects of the Proposed Project would not be considerable in light of the effects of other current projects and probable future projects, appropriate mitigation measures (see Sections B.3.1 through B.3.16) are identified. The mitigation measures would reduce the construction-related effects of the Proposed Project to less than significant levels.

Other current projects and probable future projects are likely to bring residential land uses much closer to the project site than they are in the current conditions. After the project has been constructed, the primary permanent effects of the Proposed Project would be the incremental aesthetic and visual change and slightly increased noise. The analysis of these issues in Section B.3.1, Aesthetics, and Section B.3.11, Noise, addresses the effects of future homes around the proposed substation from a cumulative perspective.

The incremental aesthetic and visual effects of the Proposed Project are considered in combination with past and ongoing visual changes in the area and the anticipated changes brought about by future projects. Over time, visual conditions in the project vicinity have changed substantially as a result of land development. The incremental change in visual conditions associated with the Proposed Project contributes to this cumulative change in visual conditions, but represents only a relatively minor incremental change in cumulative conditions. Therefore, the project's visual effects are adverse, but not considerable enough to represent a significant cumulative impact. Similarly, the noise levels caused by the Proposed Project at the location of probable future residences would not result in any significant long-term impacts. With regard to the remaining areas of analysis, individually and cumulatively, the Proposed Project would not result in any significant long-term impacts that would substantially combine with impacts of other current and probable future impacts. Consequently, the Proposed Project would not create impacts that are cumulatively considerable.

*c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?*

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* The preceding sections of this Initial Study discuss various types of impacts that could have adverse effects on human beings, including:

- Changing the visual character of the agricultural land and increasing light and glare in the vicinity of the existing and future residential land use (see Section B.3.1, Aesthetics),
- Dust and air pollutants emitted during project construction activities (see Section B.3.3, Air Quality),
- Potential release of residual herbicides, pesticides, and/or fumigants found in agricultural soils (see Section B.3.7, Hazards and Hazardous Materials), and
- Noise generated by project construction and operation (see Section B.3.11, Noise).

These are primarily temporary impacts associated with project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated, and this Initial Study concludes that all of these potential impacts are either less than significant or can be mitigated to a less than significant level with the implementation of measures presented herein (see also Section C, Mitigation Monitoring Plan, for a complete listing of the mitigation measures including Applicant Proposed Measures). Therefore, the Proposed Project does not involve any activities, either during construction or operation, which would cause significant adverse effects on human beings that cannot be readily mitigated to a less than significant level.