# **Executive Summary**

## ES.1 INTRODUCTION/BACKGROUND

Southern California Edison (SCE) filed an application (Application Number A.07-02-022) for a Permit to Construct (PTC) with the California Public Utilities Commission (CPUC) on February 16, 2007 for the El Casco System Project (Proposed Project). The El Casco System Project includes the proposed El Casco Substation site, upgrades to the Zanja and Banning Substations and the SCE's Mill Creek Communications Site, upgrading of a total of 15.4 miles of existing 115 kV subtransmission line and associated structures, and the installation of fiber optic cables within existing conduits in public streets and on existing SCE structures between the Cities of Redlands and Banning.

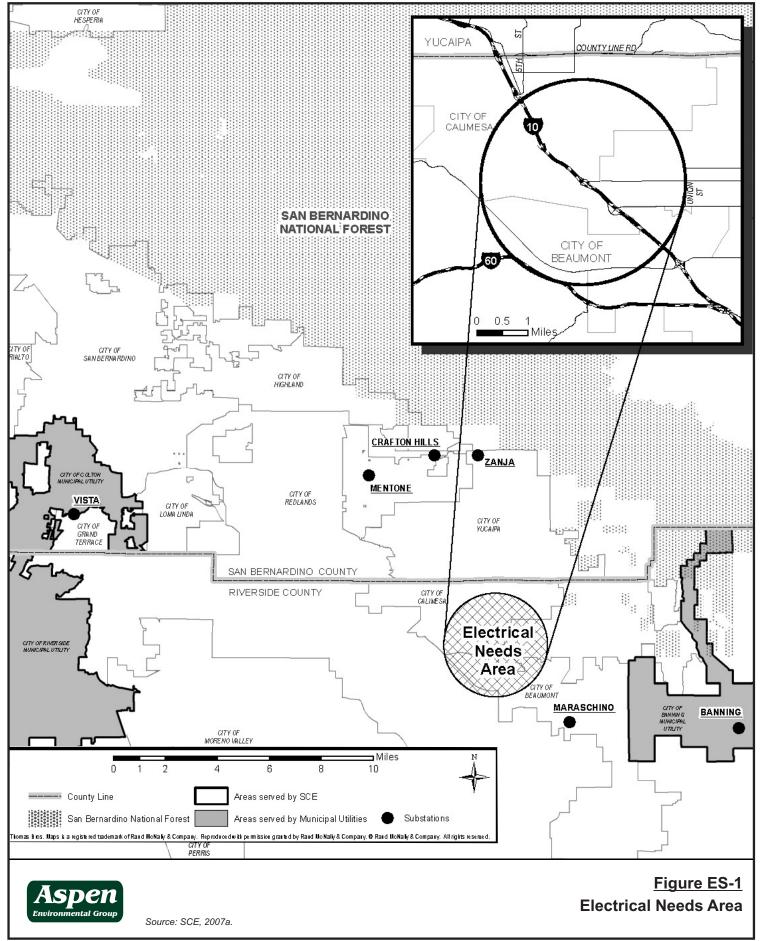
SCE's stated objectives for the Proposed Project are: (1) to serve long-term projected electrical load requirements in the Electrical Needs Area shown in Figure ES-1 (i.e., northern Riverside County); (2) to provide enhanced system reliability by constructing a project in a suitable location to serve the Electrical Needs Area; (3) to provide greater operational flexibility to transfer load between lines and substations; (4) to provide substations with more than one 28 mega volt ampere (MVA) transformer with service from two 115 kV lines; (5) to provide safe and reliable electrical service consistent with SCE's planning guidelines and Subtransmission Guidelines; (6) to meet project need while minimizing environmental impacts; and (7) to meet project need in a cost-effective manner.

The CPUC is the State lead agency, responsible for compliance with the California Environmental Quality Act (CEQA). A Draft Environmental Impact Report (EIR) analyzing the Proposed Project and alternatives was published by the CPUC on December 12, 2007 (referred to as original Draft EIR) in compliance with CEQA Guidelines. In addition, a Final EIR was published in April 11, 2008. Subsequent to the completion of the Final EIR, SCE provided new information regarding the ambient noise levels adjacent to the existing single-circuit 115 kV subtransmission line. Per CEQA Guidelines §15088.5(a), recirculation is required when significant new information changes the EIR in a way that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." This includes changes in the project or environmental setting as well as additional data or other information. The CPUC has determined that new information provided by SCE regarding the environmental setting requires recirculation of the El Casco System Project EIR.

Per CEQA Guidelines \$15088.5(c), only sections that have changed due to the new information provided by SCE need to be included in the recirculated EIR. Therefore, this recirculated EIR contains an updated noise analysis (Section D.9 – Noise) reflecting the new information received from SCE, an updated cumulative noise effects analysis (provided in Section D.9.8, replacing Section F.1.5.8 – Cumulative Impact Analysis, Noise), and an updated Comparison of Alternatives analysis (Section E). This Executive Summary has also been updated to summarize the changes to the above mentioned sections.

The El Casco System Project EIR is an informational document; it does not make a recommendation regarding the approval or denial of the project. The purpose of the EIR is to inform the public on the environmental setting and impacts of the Proposed Project and alternatives. The EIR will be used by the CPUC in conducting the proceeding to determine whether to grant SCE's requested PTC.

El Casco System Project EXECUTIVE SUMMARY



**Recirculated Draft EIR** 

The following sections provide the reader with a brief description of the Proposed Project and alternatives that were analyzed in detail in the original Draft EIR (December 2007); a summary of environmental noise impacts, which have been updated as a result of new information provided by SCE subsequent to the completion of the Final EIR in April 2008; and a summary of the comparison of alternatives analysis, which was reevaluated as a result of the new baseline noise information submitted by SCE subsequent to the release of the Final EIR in April 2008.

#### ES.1.1 Proposed Project

#### **Description of the Proposed Project**

Figure ES-2 is an overview of the route of the subtransmission line proposed by SCE. The major elements of SCE's Proposed Project are:

- Construct the new El Casco 220/115/12 kV Substation within the Norton Younglove Reserve in the County of Riverside, associated 220 kV and 115 kV interconnections, and new 12 kV line getaways (i.e., distribution line connections out of the substation).
- Replace approximately 13 miles of existing single-circuit 115 kV subtransmission lines with new, higher capacity double-circuit 115 kV subtransmission lines and replace support structures within existing SCE rights-of-way (ROWs) in the Cities of Banning and Beaumont and unincorporated areas of Riverside County.<sup>1</sup>
- Replace approximately 1.9 miles of existing single-circuit 115 kV subtransmission lines with new, higher capacity single-circuit 115 kV subtransmission lines and replace support structures within existing SCE ROWs in the City of Beaumont and unincorporated Riverside County.
- Replace approximately 0.5 mile of existing single-circuit 115 kV subtransmission lines with new, higher capacity single-circuit 115 kV subtransmission lines on existing support structures within existing SCE ROWs in the City of Beaumont and unincorporated Riverside County.
- Rebuild 115 kV switchracks within Zanja and Banning Substations in the Cities of Yucaipa and Banning, respectively.
- Install telecommunications equipment at the proposed El Casco Substation and at SCE's existing Mill Creek Communications Site.
- Install fiber optic cables within public streets and on existing SCE structures between the Cities of Redlands and Banning.

SCE would construct the proposed El Casco Substation in northern Riverside County within the Norton Younglove Reserve in close proximity to San Timoteo Canyon Road and SCE's existing Devers-San Bernardino No. 2 220 kV transmission line ROW. The Devers-San Bernardino No. 2 220 kV transmission line would serve as the electrical source for the El Casco Substation and its 115 kV system.

The 115 kV subtransmission line work would occur between El Casco, Maraschino, and Banning Substations within existing SCE ROWs in unincorporated Riverside County and the Cities of Beaumont and Banning. The Proposed Project would also involve the rebuilding of switchracks at Banning and Zanja Substations in the Cities of Banning and Yucaipa, respectively.

As part of the new fiber optic system, microwave towers would be installed at El Casco Substation and the existing Mill Creek Communications Site, located on SCE-owned property within the San Bernardino National Forest. Five new fiber optic circuits would be installed between the Cities of Redlands and Banning within existing SCE ROWs.

The Proposed Project would be constructed and operational in two phases (Phase 1 and Phase 2) from approximately January 2009 to June 2010.

<sup>&</sup>lt;sup>1</sup> Various segments of the existing 115 kV subtransmission lines also have distribution lines on the same structures. Where there are existing distribution lines on the structures, they would be transferred to the new structures.

#### **Environmental Setting of the Proposed Project**

The Proposed Project is located in northern Riverside County and southern San Bernardino County, within the cities of Banning, Beaumont, Calimesa, Yucaipa, and Redlands, and unincorporated county lands.

**El Casco Substation and the 115 kV Subtransmission Line Route.** The proposed El Casco Substation would be located within the Norton Younglove Reserve in the County of Riverside. From this substation, the proposed 115 kV subtransmission line would be located within existing SCE ROWs through unincorporated Riverside County and the Cities of Beaumont and Banning, where it would connect to SCE's existing Banning Substation. The majority of the Proposed Project 115 kV ROW traverses open space areas west of the Maraschino Substation. As the route approaches the eastern portions of Beaumont, east of State Route 79, the ROW traverses residential developments. East of Highland Home Road in Banning, the ROW traverses open space areas. As the route turns north to connect to the Banning Substation, it traverses residential and some light industrial development near Interstate 10.

**Other Substations, Facilities, and Fiber Optic Cable Route.** Proposed Project activities at the Zanja and Banning Substations (located in the Cities of Yucaipa and Banning, respectively) would occur within substation boundaries. In addition, installation of telecommunications equipment at the proposed El Casco Substation and at SCE's existing Mill Creek Communications Site (located on private land in the San Bernardino National Forest) would occur within the boundaries of those existing facilities.

SCE would install fiber optic cables within public streets and on existing SCE structures between the City of Redlands in San Bernardino County and the City of Banning in Riverside County. Similar to the subtransmission line route, the fiber optic cable route traverses predominantly open space areas and residential development.

#### ES.2 Alternatives

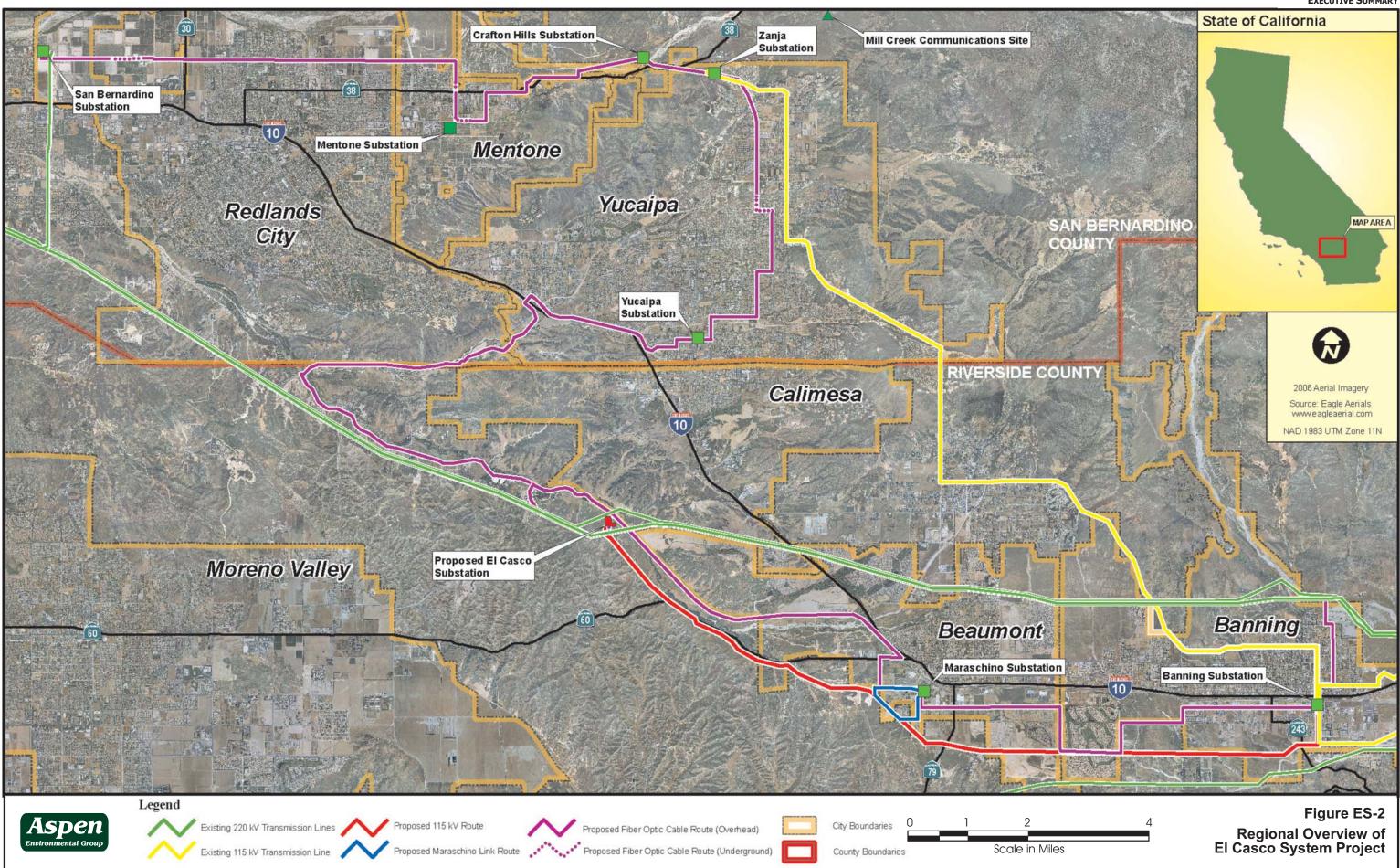
Alternatives to SCE's Proposed Project have been identified and evaluated in accordance with CEQA Guidelines. CEQA Guidelines (§15126.6[a]) state:

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

CEQA Guidelines (§15364) define feasibility as:

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

Alternatives to the Proposed Project were suggested during the scoping period (July/August 2007) by the general public and government agencies after SCE filed its Application for a PTC. Other alternatives were developed by EIR preparers or presented by SCE in its PEA. In total, eight alternatives were identified, including alternative route alignments or substation sites, alternative system configurations, and partial undergrounding of the route.



# El Casco System Project Executive Summary

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Alternatives to the Proposed Project were screened according to CEQA guidelines to determine those alternatives to carry forward for analysis in the EIR and alternatives to eliminate from detailed consideration. The alternatives were primarily evaluated according to: (1) whether they would meet most of the basic project objectives; (2) whether they would be feasible considering legal, regulatory and technical constraints; and (3) whether they have the potential to substantially lessen any of the significant effects of the Proposed Project. Other factors considered, in accordance with CEQA Guidelines (CEQA Guidelines §15126.6[f][1]), were site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, jurisdictional boundaries, and proponent's control over alternative sites. Economic factors or costs of the alternatives (beyond economically feasible) were not considered in the screening of alternatives since CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives or would be more costly" (CEQA Guidelines §15126.6[b]). A summary description of the alternatives considered is provided below.

#### ES.2.1 Alternatives Fully Evaluated in the EIR

#### **CPUC's Northerly Route Alternative Option 3**

Alternative Description. This 21.8-mile route was recommended by CPUC and refined by SCE. Route Alternative Option 3 would consist of: (1) rebuilding the entire El Casco-Maraschino 115 kV subtransmission line; (2) rebuilding a portion of the Banning-Maraschino 115 kV subtransmission line; and (3) creating the El Casco-Banning and El Casco-Zanja 115 kV subtransmission lines from a combination of new construction and rebuilding of a portion of the existing Devers-Banning-Windpark-Zanja 115 kV subtransmission line. Nine and one half (9.5) miles of this route would be new 115 kV subtransmission line located in an existing SCE transmission line, and the Devers-Vista double-circuit 220 kV transmission line. 5.8 miles of upgrades would occur between El Casco and Maraschino Substations in the same ROW as the Proposed Project. This alternative would avoid the Proposed Project construction activities between Maraschino and Banning Substations. SCE's existing single-circuit 115 kV subtransmission line in this area is currently energized but carries load only during emergency situations. With this alternative, this existing line would be load carrying at all times. The remaining 6.5 miles of this route would occur between Banning Substation and the "Zanja Break-off" on existing subtransmission line structures.

**Rationale for Full Analysis.** This alternative is feasible and would meet all project objectives. During the alternatives development and screening process (documented in Appendix 1 of the EIR), it was determined that there is a potential for this alternative to reduce or avoid significant Proposed Project environmental impacts to visual and recreational resources, and to reduce project-related construction and operation nuisances near residences.

#### Partial Underground Alternative

Alternative Description. The Partial Underground Alternative was developed as a partial overhead/ underground alternative due to comments raised during the scoping process. With this alternative, the existing H-frame wood poles for SCE's existing overhead single-circuit 115 kV subtransmission line through the Sun Lakes community would be removed, and a new double-circuit 115 kV subtransmission line would be installed underground within the existing SCE ROW between approximately Mile 9.0 and 10.0, beginning just east of Highland Springs Avenue and ending just east of S. Riviera Avenue and west of S. Highland Home Road. Once through the Sun Lakes community, at approximately Mile 9.9, the new double-circuit 115 kV subtransmission line would transition back to overhead construction as described for the Proposed Project. This alternative would require approximately 10 fewer new steel poles (assuming one pole every 400 to 800 feet, which is the same as the current spacing), as the subtransmission lines would be placed underground rather than on overhead infrastructure. **Rationale for Full Analysis.** This alternative is feasible and meets all project objectives. In addition, the Partial Underground Alternative eliminates the existing and proposed subtransmission line through the Sun Lakes community.

# ES.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES - NOISE

**Impact Assessment Methodology.** The analysis of noise impacts is based upon the environmental setting applicable to noise and the manner in which the construction, operation and maintenance of the Proposed Project or alternatives would affect the environmental setting and related noise conditions. This analysis has been revised in light of new information provided by SCE on the environmental setting and the calculation of noise levels resulting from the Proposed Project 115 kV line operation. This information was provided subsequent to the publishing of the Final EIR in April 2008. In accordance with CEQA requirements and guidelines, the impact assessment methodology also considers the following three topics: (1) the regulatory setting, and evaluates whether the Proposed Project or alternatives would be consistent with adopted federal, State, and local regulations and guidelines, (2) growth-inducing impacts, and (3) cumulative impacts. The discussion of growth-inducing impacts has not changed as a result of the new information provided by SCE subsequent to the publishing of the Final EIR, and therefore has not been included in this recirculated EIR. Cumulative impacts, however, have been updated and are included within Section D.9.8 (Cumulative Impact Analysis – Noise) of this recirculated EIR. Regulatory compliance issues are also discussed in Section D.9.2 (Applicable Regulations, Plans and Standards – Noise).

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

- **Class I:** Significant impact; cannot be mitigated to a level that is not significant
- **Class II:** Significant impact; can be mitigated to a level that is not significant

**Class III:** Adverse impact, less than significant

Class IV: Beneficial impact

SCE has proposed measures to reduce impacts to construction noise. These types of actions are termed "Applicant-Proposed Measures (APMs)" in the EIR and are considered in the impact assessment as part of SCE's Proposed Project description. As such, these measures are different from CEQA mitigation measures, described below.

**Mitigation Measures.** The EIR describes feasible measures that could minimize significant adverse impacts (CEQA Guidelines §15126.4). Within Section D.9 (Noise), no mitigation measures are recommended as environmental effects of construction and operation of the Proposed Project and alternatives would result in less than significant impacts or could be substantially minimized through the use of APM's to a less than significant level. The manner of compliance with these AMPs is presented in the Mitigation Monitoring Program table at the end of the analysis for noise in Section D.9.7.

The major findings of the revised EIR analysis for noise are summarized below. Regulatory issues pertinent to noise are identified, along with a summary of the primary Class I (significant, unmitigable) and Class II (significant, mitigable) impacts, as applicable, which would be expected from the construction and operation of the Proposed Project. Comparative effects of the alternatives are also provided. Impact findings and mitigation measures for the Proposed Project and alternatives, summarizing the findings of this recirculated EIR, specifically for noise, are presented in the Impact Summary Tables at the end of this Executive Summary.

### ES.3.1 Noise

#### ES.3.1.1 Proposed Project

SCE has committed to implementing three APMs to reduce noise and vibration impacts during construction. The implementation of these APMs would reduce temporary construction noise and vibration impacts associated with the Proposed Project to a less than significant (Class III) level.

The proposed 115 kV subtransmission line would be routed through the Cities of Banning, Beaumont, and unincorporated portions of Riverside County within approximately 0.25 mile (1,320 feet) of residential homes in the vicinity of the Maraschino Substation (City of Beaumont); residential homes near Manzanita Park Road (County of Riverside): residential neighborhoods between Highland Springs Avenue and Highland Home Road (City of Banning); and isolated residential homes south of the existing Banning Substation (City of Banning). The Proposed Project would be located within an existing SCE ROW through these areas, and the existing 115 kV line contributes noise to the ambient noise conditions of the area. Corona noise calculations completed by SCE show that the replacement of the exiting 115 kV line with the new proposed 115 kV line would result in an approximately 7 dBA decrease in corona noise over that currently generated by the existing line under the  $L_{50}$  rainy condition. As the existing single-circuit 115 kV subtransmission line in this area is currently energized, it generates corona noise at all times. As described in Section D.9 (Noise), the decrease over existing conditions is attributed to the replacement of existing 115 kV conductor wire with larger conductor wire, which decreases corona noise generation. In addition, SCE plans to install polymer (Silicon Rubber) insulators when rebuilding the existing subtransmission lines. This material is hydrophobic (i.e., repels water), and is able to transfer this hydrophobicity to surface contaminants (e.g., soot, dirt, etc.). This inhibits contaminant build-up on the insulators' surface, which reduces the potential for corona noise to be generated at the pole locations. More specifically, the existing single-circuit 115 kV line produces approximately 31 dBA under the centerline as compared to the Proposed Project double-circuit 115 kV, line which would produce approximately 24 dBA directly under the centerline of the equipment. This noise level is in compliance with the various local general plan standards and noise ordinances. As such, corona noise would be a less than significant impact of the Proposed Project (Class III). In addition, noise from maintenance and inspection activities would be temporary and short term, and these activities would be conducted in accordance with all applicable noise regulations. As such, noise from maintenance and inspection activities would be less than significant (Class III).

#### Cumulative Impacts

Construction activities associated with other projects located within 0.25 mile of the Proposed Project that would occur at the same time as the Proposed Project could possibly violate local noise standards. However, the implementation of APMs associated with the Proposed Project to reduce construction noise and vibration would result in a less than significant (Class III) cumulative contribution to construction noise impacts. Cumulative development within 0.25 miles of the Proposed Project subtransmission line ROW could result in a decrease in corona noise along the ROW as compared to the corona discharge noise currently emitted by the exiting 115 kV line. Therefore, the effect of operational corona noise combined with other proposed development projects located within close proximity to the proposed subtransmission line would be cumulatively less than significant (Class III).

#### ES.3.1.2 Alternatives

#### CPUC's Northerly Route Alternative Option 3

Receptors located directly adjacent to construction sites along the 115 kV subtransmission line route proposed for the Route Alternative Option 3 would experience temporary significant noise and vibration impacts from construction activities. SCE has committed to implementing three APMs to reduce noise and

vibration impacts associated with construction. The implementation of these APMs would reduce temporary construction noise impacts associated with Route Alternative Option 3 to a less-than-significant (Class III) level.

Segments of the Route Alternative Option 3 proposed 115 kV subtransmission line would expose receptors to a decrease in corona noise over existing conditions. This impact would be a less than significant impact of the Route Alternative Option 3 (Class III). In addition, noise from maintenance and inspection activities would be temporary and short term, and these activities would be conducted in accordance with all applicable noise regulations. As such, noise from maintenance and inspection activities would be less than significant (Class III).

*Cumulative Impacts.* Cumulative construction impacts for the Route Alternative Option 3 would be similar to that presented above for the Proposed Project. Construction activities associated with other projects located within 0.25 mile of Route Alternative Option 3 construction sites that would occur at the same time could possibly violate local noise standards. However, the implementation of APMs would result in a less-than-significant (Class III) cumulative contribution to construction noise impacts. Cumulative development within 0.25 miles of the Route Alternative Option 3 subtransmission line ROW could result in an increase to ambient noise levels of the area. However, as the proposed line would emit less corona noise than the existing line, the Route Alternative Option 3 contribution to noise would not be cumulatively considerable. Therefore, cumulatively less than significant (Class III) permanent noise impacts could occur.

#### Partial Underground Alternative

Implementation of the Partial Underground Alternative would result in a large amount of heavy construction equipment along the underground segment of the route, and receptors located directly adjacent to construction sites would experience temporary significant noise and vibration impacts from construction activities. It should be noted that construction of this alternative would take 10 months. Therefore, construction noise impacts to surrounding receptors along the underground segment would occur within this small isolated area and would occur for an extended duration. However, due to the temporary nature of construction noise and the implementation of APMs to reduce construction noise, construction noise impacts associated with the Partial Underground Alternative would be less than significant (Class III).

The permanent noise sources that would occur with operation of the Partial Underground Alternative are limited to the corona effect of the overhead subtransmission line and routine inspection and maintenance of the line. For the segment of proposed new 115 kV subtransmission line to be located underground, no corona discharge noise would occur above ground. The remaining sections of above ground subtransmission line would have identical existing and projected operational corona noise as that described for the Proposed Project. Therefore, the Partial Underground Alternative would not result in an increase to ambient noise levels over existing conditions as a result of corona discharge noise associated with operating the proposed 115 kV subtransmission line. This impact would be less than significant for the Partial Underground Alternative (Class III). While the placement of a section of the 115 kV line underground would eliminate all corona noise from the existing above ground line along that underground portion, corona discharge noise from the existing above ground line along that underground portion, corona discharge noise associated with operation.

*Cumulative Impacts.* Cumulative construction impacts for the Partial Underground Alternative would be similar to those presented above for the Proposed Project. Construction activities associated with other projects located within 0.25 mile of Partial Underground Alternative construction sites that would occur at the same time could possibly violate local noise standards. However, the implementation of APMs would result in a less than significant (Class III) cumulative contribution to construction noise impacts. Cumulative development within 0.25 miles of the Partial Underground Alternative above ground portions of the subtransmission line ROW could combine with other proximate development to further increase ambient noise levels. However, as the proposed line would emit less corona noise than the existing line, the Partial

Underground Alternative contribution to noise would not be cumulatively considerable. Therefore, cumulatively less than significant (Class III) permanent noise impacts could occur.

#### No Project Alternative

To address the overload conditions in the Maraschino Substation service area, SCE would add a third 28 MVA transformer and two 12 kV distribution lines (each approximately nine miles in length) at Maraschino Substation in 2007. In addition, switchrack rebuilds at Banning and Zanja Substations would need to be completed. These activities would generate short-term temporary construction noise impacts to surrounding receptors. The implementation of APMs similar to those for the Proposed Project would be required to reduce temporary construction noise impacts associated with the No Project Alternative to a less than significant (Class III) level.

The No Project Alternative would introduce a permanently load carrying line to residential receptors along the Banning to Maraschino line segment that are already currently exposed to regular corona noise. Furthermore, the location of the required new 12 kV lines is unknown; however, it is likely that they would generate corona noise well below that calculated for the Proposed Project. Therefore, the No Project Alternative would not expose receptors to a permanent increase in ambient noise levels resulting from corona noise, and corona noise would be a less than significant (Class III) impact of the No Project Alternative.

*Cumulative Impacts.* Construction of required No Project Alternative upgrades could combine with other proximate construction projects to create cumulative construction noise impacts. However, it is assumed that APMs presented for the Proposed Project to reduce noise impacts would be implemented by SCE during the construction of electric facility upgrades required under the No Project Alternative. The implementation of these APMs would reduce the No Project Alternatives contribution to cumulative construction noise to a less than significant (Class III) level.

The No Project Alternative would require the construction of two 12 kV distribution lines (each approximately nine miles in length) at Maraschino Substation. As the location of these ROWs is unknown, it is possible that corona noise associated with these new 12 kV lines could impact sensitive receptors. The corona noise associated with a 12 kV line would be minimal, and it would not be a permanent noise source over existing conditions. In the event the Proposed Project or an alternative to the Proposed Project would not occur, the existing single-circuit 115 kV subtransmission line along this segment would have to carry load at all times. However, because this line is energized at all times but only load carrying when it is needed to serve loads during emergency situations, the line currently emits corona noise levels to sensitive receptors along this segment. While the addition of approved or pending projects that could occur within 0.25 miles of the required new 12 kV ROWs could increase ambient noise levels of the area, the cumulative contribution of operational corona noise associated with the No Project alternative would be less than significant (Class III).

# ES.4 SUMMARY COMPARISON OF THE PROPOSED PROJECT AND ALTERNATIVES

#### ES.4.1 Methodology

CEQA requires identification of an environmentally superior alternative if the No Project Alternative is found to have the least impacts, but does not provide specific direction regarding the methodology of alternatives comparison. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and

permanent loss of habitat or loss of use of recreational facilities). Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less than significant levels are considered to be relatively less important, although are still considered.

The methodology used to compare alternatives in this EIR started with identification of alternatives. Based on alternatives suggested during scoping, an intensive evaluation process was completed that resulted in the determination that the EIR would analyze two subtransmission line alternatives, including the CPUC's Northerly Route Alternative Option 3 and the Partial Underground Alternative. A No Project Alternative was also identified and the scenario was defined. While six other alternatives were evaluated, they did not meet CEQA criteria for analysis. The second step required assessment of the environmental impacts of the Proposed Project and the alternatives. The third step was the comparison of the impacts of each alternative to those of the Proposed Project to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project Alternative.

Although this comparison focuses on the most important issue areas (e.g., air quality, visual resources, biological resources, land use, and recreation), determining an environmentally superior alternative is difficult because of the many factors that must be balanced. While the EIR identifies an environmentally superior alternative, it is possible that the ultimate decision-makers could balance the importance of each impact area differently and reach a different conclusion. Section E (Comparison of Alternatives) of this recirculated EIR provides the detailed comparison of alternatives, which has been updated in light of new information provided by SCE subsequent to the publication of the Final EIR in April 2008 and to be consistent with the constitutional requirement that there be "rough proportionality" between the impacts of the project and the measures identified to reduce or avoid those impacts, and an essential nexus (i.e., connection) between a legitimate governmental interest and the measures identified to further that interest. (CEQA Guidelines §15126.4[a][4]). Accordingly, the environmental superiority of alternatives is based on a comparison of significant impacts that would result from the Proposed Project and the alternatives identified in the EIR and does not consider whether the Proposed Project or an alternative would improve existing environmental conditions.

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

Table ES-1 lists the significant unavoidable (Class I) impacts of the Proposed Project and all project alternatives analyzed within the EIR, as well as the associated cumulative impacts. Both the original analysis in the Draft EIR published in December 2007 and the updated analysis provided in this recirculated EIR are summarized. Based on the new information provided by SCE, the Class I impacts associated with noise for the Proposed Project and alternatives, specifically Impact N-3, have been reduced to Class III and have been moved to Tables ES-3 to ES-5 (see Section ES.5 below).

	Significant Impacts
Proposed Project	AQ-1 (Construction emissions exceed regional significance criteria); AQ-2 (Construction emissions exceed localized significance criteria); AQ-3 (Emissions contribute to climate change).
	Cumulatively exceed regional emission thresholds; Cumulatively exceed localized emission thresholds; Cumulatively increase greenhouse gas emissions impacting climate change; Cumulatively cause temporary or permanent loss of native vegetation communities; Cumulatively cause loss of foraging or breeding habitat for wildlife; Cumulatively introduce non-native and invasive plant species; Cumulatively result in a loss of nesting birds; Cumulatively result in indirect or direct loss of listed plants; Cumulatively result in indirect or direct loss of Quino Checkerspot habitat; Cumulatively result in habitat loss or disturbance to listed birds including migratory birds and raptors; Cumulatively result in the electrocution of listed and special-status bird species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of native plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of native plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant spec

Table ES-1. Significant Unavoidable (Class I) Impacts of the Proposed Project and Alternatives

	Significant Impacts
	loss of special-status reptile species; Cumulatively result in the loss of burrowing owls; Cumulatively result in the loss of foraging habitat or disruption of nesting for special-status raptor species; Cumulatively result in the loss of the American badger; Cumulatively result in loss of special-status rodent species; Cumulatively result in the loss of jurisdictional waters and wetlands; and Cumulatively result in the loss or restriction of habitat connectivity in Constrained Linkage 22; Cumulatively expose people or structures to a significant risk of loss, injury or death involving wildland fires; Construction activities would cumulatively degrade surface water and groundwater quality; Operational activities would cumulatively degrade surface water and groundwater quality; Cumulative impacts to a perceived increase in industrialization of the landscape.
Northerly Route Alternative Option 3	AQ-1 (Construction emissions exceed regional significance criteria); AQ-2 (Construction emissions exceed localized significance criteria); AQ-3 (Emissions contribute to climate change); CR-4 (Pole Replacement Has the Potential to Indirectly Impact Historical Resources); V-13 (Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 11 on westbound Summit Drive).
	Cumulatively exceed regional emission thresholds; Cumulatively exceed localized emission thresholds; Cumulatively increase greenhouse gas emissions impacting climate change; Cumulatively cause temporary or permanent loss of native vegetation communities; Cumulatively cause loss of foraging or breeding habitat for wildlife; Cumulatively introduce non-native and invasive plant species; Cumulatively result in a loss of nesting birds; Cumulatively result in indirect or direct loss of listed plants; Cumulatively result in indirect or direct loss of Quino Checkerspot habitat; Cumulatively result in habitat loss or disturbance to listed birds including migratory birds and raptors; Cumulatively result in the electrocution of listed and special-status bird species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of special-status reptile species; Cumulatively result in the loss of burrowing owls; Cumulatively result in the loss of foraging habitat or disruption of nesting for special-status raptor species; Cumulatively result in the loss of special-status rodent species; Cumulatively result in the loss of special-status rodent species; Cumulatively result in the loss of special-status rodent species; Cumulatively result in the loss of special-status rodent species; Cumulatively result in the loss of special-status rodent species; Cumulatively result in the loss of jurisdictional waters and wetlands; and Cumulatively result in the loss or restriction of habitat connectivity in Constrained Linkage 22; Cumulatively expose people or structures to a significant risk of loss, injury or death involving wildland fires; Construction activities would cumulatively degrade surface water and groundwater quality; Operational activities would cumulatively degrade surface water and groundwater qu
Partial Underground Alternative	AQ-1 (Construction emissions exceed regional significance criteria); AQ-2 (Construction emissions exceed localized significance criteria); AQ-3 (Emissions contribute to climate change); LU-2 (Construction would temporarily disturb the land uses it traverses or adjacent land uses); LU-8 (Construction or operation would disrupt recreational activities such that recreational values would be reduced).
	Cumulatively exceed regional emission thresholds; Cumulatively exceed localized emission thresholds; Cumulatively increase greenhouse gas emissions impacting climate change; Cumulative impacts to a perceived increase in industrialization of the landscape; Cumulatively cause temporary or permanent loss of native vegetation communities; Cumulatively cause loss of foraging or breeding habitat for wildlife; Cumulatively introduce non-native and invasive plant species; Cumulatively result in a loss of nesting birds; Cumulatively result in indirect or direct loss of listed plants; Cumulatively result in indirect or direct loss of Quino Checkerspot habitat; Cumulatively result in habitat loss or disturbance to listed birds including migratory birds and raptors; Cumulatively result in the electrocution of listed and special-status bird species; Cumulatively result in the loss of special-status plant species; Cumulatively result in the loss of habitat for sensitive wildlife; Cumulatively result in indirect or direct loss of burrowing owls; Cumulatively result in the loss of foraging habitat or disruption of nesting for special-status raptor species; Cumulatively result in the loss of the American badger; Cumulatively result in loss of

#### Table ES-1. Significant Unavoidable (Class I) Impacts of the Proposed Project and Alternatives

#### Table ES-1. Significant Unavoidable (Class I) Impacts of the Proposed Project and Alternatives

	Significant Impacts
	special-status rodent species; Cumulatively result in the loss of jurisdictional waters and wetlands; and Cumulatively result in the loss or restriction of habitat connectivity in Constrained Linkage 22; Cumulatively expose people or structures to a significant risk of loss, injury or death involving wildland fires; Construction activities would cumulatively degrade surface water and groundwater quality; Operational activities would cumulatively degrade surface water and groundwater quality.
No Project Alternative	AQ-3 (Emissions contribute to climate change). Cumulatively increase greenhouse gas emissions impacting climate change; Cumulatively cause temporary or permanent loss of native vegetation communities; Cumulatively cause loss of foraging or breeding habitat for wildlife; Cumulatively introduce non-native and invasive plant species; Cumulatively result in a loss of nesting birds; Cumulatively result in indirect or direct loss of listed plants; Cumulatively result in indirect or direct loss of Quino Checkerspot habitat; Cumulatively result in habitat loss or disturbance to listed birds including migratory birds and raptors; Cumulatively result in the electrocution of listed and special-status bird species; Cumulatively result in subtransmission line collisions by listed and special-status bird species; Cumulatively result in the loss of special-status plant species; Cumulatively result in indirect or direct loss of individuals or a direct loss of habitat for sensitive wildlife; Cumulatively result in the loss of special-status reptile species; Cumulatively result in the loss of burrowing owls; Cumulatively result in the loss of foraging habitat or disruption of nesting for special-status raptor species; Cumulatively result in the loss of the American badger; Cumulatively result in loss of special-status rodent species; Cumulatively result in the loss of jurisdictional waters and wetlands; and Cumulatively result in the loss or restriction of habitat connectivity in Constrained Linkage 22.

#### ES.4.3 Environmentally Superior Alternative

As presented above, Table ES-2 shows that out of the three options for implementation of the Proposed El Casco System Project, the Proposed Project would result in the least number of significant unavoidable environmental impacts. It should be noted that the only identified significant and unmitigable impacts of the Proposed Project (air quality impacts) are identical and shared among all three options. As shown in Table ES-2, below, out of the 11 environmental resource areas analyzed in detail, the Proposed Project and the Partial Underground Alternative result in identical long-term impacts. Route Alternative Option 3 would result in new long-term cultural resource and visual impacts as compared to either the Proposed Project or Partial Underground Alternative and is not preferred.

#### Table ES-2. Proposed Project vs. CPUC's Northerly Route Alternative Option 3 and Partial Underground Alternative

Issue Area Air Quality	Proposed Project Preferred. Construction would result in the lowest construction emissions. Operation and maintenance would result in less than significant long-term emissions.	Route Alternative Option 3 Construction would result in higher NOx and PM10 construction emissions when compared to the Proposed Project. Operation and maintenance would result in similar less than significant long-term emissions in comparison to the Proposed Project.	Partial Underground Alternative Construction would result in the highest NOx and PM10 emissions and highest localized impacts to sensitive receptors due to the large amount of grading and extended construction period in the Sun Lakes community. Operation and maintenance would result in similar less than significant long-term emissions in comparison to the Proposed Project.
Land Use	Preferred. Would traverse	Would traverse a large amount of	Similar to the Proposed Project, would
	adjacent to (approximately	residential development (approximately	traverse adjacent to approximately 237
	237 residential structures) in	303 residential structures) within the	residential structures in existing 115 kV
	existing 115 kV	City of Banning. Operation and	subtransmission line ROW. For the 10-
	subtransmission line ROW	maintenance would affect a greater	month construction period, land uses
	resulting in less than	number of residences when compared	would be precluded resulting in a
	significant long term land	to the Proposed Project., however all	significant and unavoidable land use

Al	ternative		
Issue Area	Proposed Project use impacts.	Route Alternative Option 3 long-term impacts are less than significant	Partial Underground Alternative impact. Although, long-term use of the golf course in Sun Lakes would be improved when compared to existing conditions, these existing conditions are not considered an impact of the Proposed Project.
Biological Resources	Preferred. Construction would result in the least amount of ground disturbance. Operation and maintenance would result in similar less than significant long-term biological resource impacts.	Reroute of 115 kV subtransmission line would increase total ground disturbance and cross a broad riparian area north of San Timoteo Creek during construction. Operation and maintenance would result in similar less than significant long-term biological resource impacts.	Extended duration of construction at underground segment would increase wildlife disruption. Operation and maintenance would result in similar less than significant long-term biological resource impacts.
Cultural Resources	Preferred. Construction would have the least potential to impact undiscovered cultural resources. Operation and maintenance would result in no long-term cultural resource impacts.	Not Preferred. Similar construction impacts to cultural resources as the Proposed Project. Operation would result in significant long-term impacts to a potential historic district along Summit Drive in the City of Banning	Increased amount of required grading during construction would result in the highest possibility of encountering undiscovered buried resources. Similar to the Proposed Project, operation and maintenance would result in no long- term cultural resource impacts.
Geology and Soils	Preferred. Construction would result in the least amount of ground disturbance during construction. Operation and maintenance would result in less than significant long- term geology and soils impacts.	Would increase the total number of subtransmission line poles required and amount of ground disturbed during construction. Operation and maintenance would result in similar less than significant long-term geology and soils impacts when compared to the Proposed Project.	Extensive trenching required would increase amount of soil disturbed and risk of erosion during construction. Operation and maintenance would result in similar less than significant long-term geology and soils impacts when compared to the Proposed Project.
Hazards and Hazardous Materials <sup>2</sup>	Preferred. Has fewest identified contaminated sites near construction zones. Operation and maintenance would result in less than significant long-term hazards and hazardous materials impacts.	Has the most identified contaminated sites near construction zones. Operation and maintenance would result in similar less than significant long-term hazards and hazardous materials impacts when compared to the Proposed Project.	Required trenching would increase construction activities and risk of hazardous materials used during construction. Operation and maintenance would result in similar less than significant long-term hazards and hazardous materials impacts when compared to the Proposed Project.
Hydrology and Water Quality	Preferred. Construction would result in the least amount of ground disturbance and potential surface water quality impacts. Operation and maintenance would result in less than significant long- term hydrology and water quality impacts.	Would increase the total amount of ground disturbed thus increasing the risk to surface water quality during construction. Operation and maintenance would result in similar less than significant long-term hydrology and water quality impacts when compared to the Proposed Project.	Extensive trenching required would increase the possibility of impacts to groundwater during construction. Operation and maintenance would result in similar less than significant long-term hydrology and water quality impacts when compared to the Proposed Project.
Noise	Preferred. Construction would result in the least amount of sensitive receptors impacted and would occur over the shortest duration. Operation	Construction would result in the most amount of sensitive receptors impacted. Operation would result in similar less than significant corona noise impacts when compared to the Proposed Project.	Construction would result in the same number of sensitive receptors subject to noise as the Proposed Project but would result in the most construction intensity and longest duration of construction to receptors impacted.

#### Table ES-2. Proposed Project vs. CPUC's Northerly Route Alternative Option 3 and Partial Underground Alternative

 $<sup>^{2}</sup>$  EMF impacts are not considered in this analysis as EMF is not considered a CEQA issue.

7.00	lemative		
Issue Area	Proposed Project	Route Alternative Option 3	Partial Underground Alternative
	would result in less than significant long-term corona noise impacts.		Operation would result in similar less than significant corona noise impacts when compared to the Proposed Project.
and Utilities	Preferred. Construction would result in the least amount of generated solid waste and shortest construction schedule. Operation and maintenance would result in less than significant long-term public services and utilities impacts.	Construction would require the removal of more poles during construction, thus increasing solid waste. Operation and maintenance would result in similar less than significant long-term public services and utilities impacts when compared to the Proposed Project.	Construction would result in an increase in soil spoils due to underground construction. Trenching would require an increase in water use for dust suppression. Operation and maintenance would result in similar less than significant long-term public services and utilities impacts when compared to the Proposed Project.
Transportation and Traffic	Preferred. Construction would travel through the least amount of residential development. Operation and maintenance would result in less than significant long- term transportation and traffic impacts.	Construction activities within City of Banning residential neighborhoods would likely result in more traffic delays. Operation and maintenance would result in similar less than significant long-term transportation and traffic impacts when compared to the Proposed Project.	Extended construction duration within the Sun Lakes community would increase roadway delays. However, operation and maintenance would result in similar less than significant long-term transportation and traffic impacts when compared to the Proposed Project.
Visual Resources	Preferred. Construction would result in the least amount of residences impacted. Operation would require mitigation to decrease long-term visual impacts.	Not Preferred. Construction would result in the highest amount of residences impacted. Operation would result in a significant unavoidable visual impact to views from Summit Drive.	Construction would result in the identical number of residences impacted as the Proposed Project. While, the underground segment of subtransmission line would eliminate existing above-ground visible 115 kV subtransmission line wood poles in the Sun Lakes Community, existing conditions are not considered an impact of the Proposed Project.

#### Table ES-2. Proposed Project vs. CPUC's Northerly Route Alternative Option 3 and Partial Underground Alternative

Note: Impacts associated with construction (i.e., temporary or short-term) or those that are easily mitigable to less than significant levels are considered to be less important than the long-term effects when comparing project alternatives.

Although the Partial Underground Alternative would improve existing conditions by removing the existing 115 kV subtransmission line wood poles along a one mile portion of the route through the Sun Lakes Community, the improvement in existing conditions is not considered in the determination of the environmentally superior alternative to be consistent with the constitutional requirement that there be "rough proportionality" between the impacts of the project and the measures identified to reduce or avoid those impacts, and an essential nexus (i.e., connection) between a legitimate governmental interest and the measures identified to further that interest (CEQA Guidelines §15126.4[a][4]). Because the long-term environmental impacts of the Proposed Project and the Partial Underground Alternative are so similar, the determination of the environmentally superior alternative must also consider short-term construction impacts. The Partial Underground Alternative would result in greater short-term construction impacts in all resource areas analyzed in the EIR over a longer period of time due to the intense construction activities that would occur during the 10 month construction period required to construct this alternative. Short-term construction impacts for the Partial Underground Alternative would be significant and unavoidable with respect to land use. Based on this comparison, the Proposed Project is determined to be the Environmentally Superior Alternative. Impacts of the Environmentally Superior Alternative are defined in each issue area's impact analysis as presented in Section D (Environmental Analysis) within the original Draft EIR published in December 2007 and in Section D.9 (Noise) of this recirculated EIR

#### ES.4.4 Environmentally Superior Alternative vs. No Project Alternative

The Environmentally Superior Alternative (Proposed Project) would be located in an existing SCE 115 kV subtransmission line ROW, and would replace an existing single-circuit 115 kV subtransmission line on wood poles with a double-circuit 115 kV subtransmission line on steel poles. Because the main components of the subtransmission line development would occur in existing ROWs, the Environmentally Superior Alternative would have minimal long-term impacts on residences or other sensitive land uses. The Environmentally Superior Alternative would also include development of a new substation, and upgrades to existing substations (within substation boundaries) and associated telecommunications facilities (i.e., fiber optic line in existing underground conduits or on existing SCE subtransmission poles, and upgrades to the Mill Creek Communications Site).

Without upgrades to the existing system, to address the overload conditions in the Maraschino Substation service area, SCE would add a third 28 MVA transformer and two 12 kV distribution lines (each approximately 9 miles in length) at Maraschino Substation. In addition, switchrack rebuilds at Banning and Zanja Substations would need to be completed. These activities would generate short-term temporary construction impacts similar to those of the Proposed Project (Environmentally Superior Alternative) including significant unavoidable air quality emissions, short-term noise generation, temporary traffic delays and lane closures, impacts to biological resources, and potential cultural resource impacts. Furthermore, because the location of the required new 12 kV distribution lines is unknown under the No Project Alternative scenario, it is assumed that this required improvement to SCE's existing system would result in similar operational visual impacts, noise impacts, and land use impacts as the Proposed Project. Therefore, APMs and mitigation similar to those recommended within this EIR to reduce impacts associated with the Proposed Project would need to be implemented by SCE for system upgrades required under the No Project Alternative scenario to reduce environmental impacts.

Electrical infrastructure improvements required for the No Project alternative would likely result in similar environmental impacts as those described in Section D (Environmental Analysis) of the original Draft EIR for the Environmentally Superior Alternative (Proposed Project), but these impacts would likely occur in different locations within the project area. Because of the eventual system upgrades needed in the project area, it is unlikely that the No Project Alternative would provide any clear advantage over the Environmentally Superior Alternative in the long-term.

### ES.5. IMPACT SUMMARY TABLES

Table ES-3, ES-4 and ES-5 on the following pages summarize identified noise impacts associated with the Proposed Project (Table ES-4) and alternatives (Tables ES-4 and ES-5) based on the updated analysis provided in this recirculated EIR. For summary information of all other issue areas, please refer to the analysis in the original Draft EIR published in December 2007 (Tables ES-3 through ES-5). For each impact, the following information is presented: impact number and title, impact class (Class I, II, III, or IV), and applicable mitigation measure(s) and/or APMs.

#### Table ES-3. Summary of Impacts and Mitigation for the Proposed Project – Noise

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Noise		
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-3: Noise from operation of the overhead subtransmission line	Class III	None
Impact N-4: Noise from inspection and maintenance activities	Class III	None

#### Table ES-4. Summary of Impacts and Mitigation for the CPUC's Northerly Route Alternative Option 3 – Noise

Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>
Noise		
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3
Impact N-3: Noise from operation of the overhead subtransmission line	Class III	None
Impact N-4: Noise from inspection and maintenance activities	Class III	None

<sup>a</sup> Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

<sup>b</sup> APMs: Full text of SCE's APMs are presented in Table B-14 in Section B (Project Description) of the original Draft EIR published in December 2007, and in each issue area subsection in Section D (Environmental Analysis).

Table ES-5. Summary of Impacts and Mitigation for the Partial Underground Alternative – Noise			
Impact	Impact Class <sup>a</sup>	Mitigation Measure(s) <sup>b</sup>	
Noise			
Impact N-1: Construction activities would temporarily increase local noise levels, impacting sensitive receptors and exceeding applicable noise regulations	Class III	APM NOI-1; APM NOI-2; APM NOI-3	
Impact N-2: Ground-borne vibration could cause a temporary nuisance during construction	Class III	APM NOI-1; APM NOI-2; APM NOI-3	
Impact N-3: Noise from operation of the overhead subtransmission line	Class III	None	
Impact N-4: Noise from inspection and maintenance activities	Class III	None	

<sup>a</sup> Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

APMs: Full text of SCE's APMs are presented in Table B-14 in Section B (Project Description) of the original Draft EIR published in December 2007, and in each issue area subsection in Section D (Environmental Analysis).