EXECUTIVE SUMMARY

ES.1 Introduction / Background

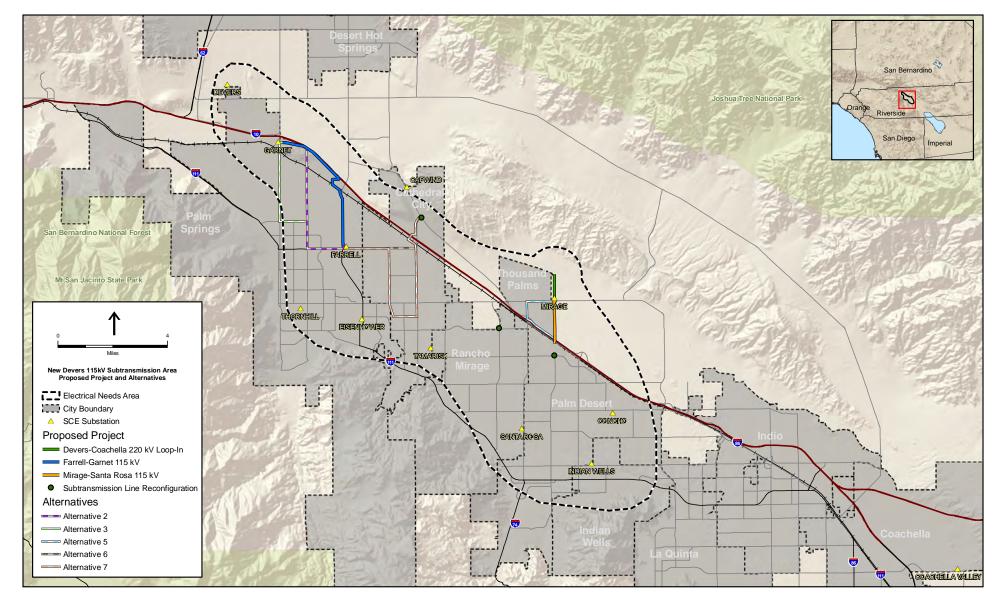
Southern California Edison Company (SCE), in its California Public Utilities Commission (CPUC) application for the Devers-Mirage 115 kV Subtransmission System Split Project (A.08-01-029), filed on January 31, 2008, seeks a Permit to Construct (PTC) electrical facilities pursuant to CPUC General Order (GO) 131-D. The application includes the Proponent's Environmental Assessment (PEA) (SCE, 2008) prepared pursuant to Rule 2.4 of the CPUC's Rules of Practice and Procedure.

The Devers-Mirage 115 kV Subtransmission System Split Project (hereinafter referred to as the Proposed Project) would serve projected electrical demand in the Electrical Needs Area, which includes the cities of Palm Springs, Rancho Mirage, Cathedral City, Palm Desert, Indian Wells, and unincorporated areas of Riverside County, including the Thousand Palms community, as shown on Figure ES-1, *Proposed Project and Alternatives and Electrical Needs Area*. The primary components of the Proposed Project include two new 115 kV subtransmission line segments and a loop-in of the existing Devers-Coachella Valley 220 kV transmission line into Mirage Substation. Other components include rearrangements and modifications of subtransmission line connections, construction of substation modifications in the cities of Palm Springs, Rancho Mirage, Indian Wells, Cathedral City, Palm Desert, and unincorporated areas of Riverside County, including the Thousand Palms community, and minor modifications to existing telecommunications equipment at the Edom Hill Communications site and the Palm Springs Service Center. Construction is scheduled to begin by the second quarter of 2010, or immediately following receipt of all project approvals. The Proposed Project is scheduled to be operational by mid-2011.

This Draft EIR has been prepared pursuant to the California Environmental Quality Act (CEQA) and considers the potential environmental impacts from the Proposed Project and identifies and evaluates a range of alternatives. Based on this evaluation and the documentation which follows, this Draft EIR identifies Alternative 5 as the Environmentally Superior Alternative for the Mirage-Santa Rosa study area and Alternative 3 as the Environmentally Superior Alternative for the Farrell-Garnet study area.

ES.1.1 Proposed Project

The Proposed Project consists of a number of distinct project components that together make up the entire Proposed Project, including two new 115 kV subtransmission lines, three 115 kV reconfigurations, a 220 kV loop-in, substation modifications, and upgrades to telecommunications



Devers-Mirage 115 kV Subtransmission System Split Project . 207059

infrastructure. Implementation of the Proposed Project would split the existing Devers 115 kV Subtransmission System into two systems (the Devers 115 kV System and the Mirage 115 kV System).

To create the new Devers 115 kV System, the Proposed Project would include construction of the proposed new Farrell-Garnet 115 kV subtransmission line. This subtransmission line would be created by replacing approximately 5.3 miles of the existing Devers-Farrell-Windland 115 kV subtransmission line on single-circuit wood poles between Garnet Substation and Farrell Substation with new double-circuit light-weight steel (LWS) poles and tubular steel poles (TSPs). Replacement would use existing SCE right-of-way (ROW) with the exception of a 0.8-mile segment that would deviate from existing ROW just north of the Union Pacific Railroad (UPRR). The new Devers System would also be supported by the reconfigured Eisenhower-Tamarisk 115 kV subtransmission line and the reconfigured Devers-Eisenhower-Thornhill 115 kV subtransmission line. Table ES-1 provides a summary of the major components that would make up the proposed Devers 115 kV System.

To create the Mirage 115 kV System, the Proposed Project would include the construction of the proposed new Mirage-Santa Rosa 115 kV subtransmission line and reconfiguration of the existing Devers-Capwind-Mirage, Garnet-Santa Rosa, Mirage-Concho, Mirage-Tamarisk, and the Santa Rosa-Tamarisk 115 kV subtransmission lines. As a result, the following 115 kV subtransmission lines would be served from Mirage Substation: Mirage-Concho, Mirage-Capwind-Devers-Tamarisk, Mirage-Santa Rosa-Tamarisk, and the newly constructed Mirage-Santa Rosa 115 kV subtransmission line. Construction of the new Mirage-Santa Rosa line and line reconfigurations associated with the Mirage 115 kV System would occur entirely within existing SCE easements or franchise locations. Table ES-1 provides a summary of the major components and construction activities that would make up the proposed Mirage 115 kV System.

The Proposed Project would include looping in the existing Devers-Coachella Valley 220 kV transmission line into the Mirage Substation, creating the Devers-Mirage No. 2 and the Mirage-Coachella Valley 220 kV transmission lines within the existing ROW located north of Mirage Substation. Additionally, the Proposed Project would require the relocation of the existing Devers-Mirage, Julian Hinds-Mirage, and Mirage-Ramon 220 kV transmission line components within the existing ROW and at Mirage Substation. This component would include installation of a total of eight new lattice steel towers (LSTs), one TSP, and the removal of four LSTs, plus the addition of new conductors, insulators, and equipment.

The Proposed Project would add minor improvements and/or upgrades to 10 existing substations within the project area. All electrical component improvements and/or upgrades would be installed within the existing fenced perimeter surrounding each substation. All construction would take place within the existing substation fences or walls, with the exception of at Farrell Substation, where a new driveway would be constructed for permanent access. Table ES-1 provides a summary of substation modifications that would occur under the Proposed Project.

TABLE ES-1 SUMMARY OF MAJOR PROJECT COMPONENTS

Devers 115 kV System

- Install approximately 15 TSPs and approximately 142 double-circuit LWS poles between Farrell and Garnet substations
- Remove 138 single-circuit wood poles
- For the existing circuit, transfer 5.3 miles of existing 653 kcmil ACSR and 0.5 mile of new 653 kcmil ACSR conductor to the new double-circuit poles
- Install 5.8 miles of new 954 SAC conductor on the new double-circuit poles
- Install two TSPs and remove one TSP inside of Eisenhower Substation
- LWS pole height: approximately 65 to 80 feet in length, of which approximately 10 feet would be buried
- TSP height: approximately 70 to 100 feet tall above ground surface
- New access: approximately 0.6 mile of new access roads and 0.1 mile of new spur roads

Mirage 115 kV System

- Install approximately seven TSPs, approximately 37 double-circuit LWS poles, and approximately 11 wood poles within existing SCE ROW
- Remove 29 wood poles
- Transfer approximately 1.5 miles of existing 653 kcmil ACSR to the new LWS and wood double-circuit poles
- Install 1.5 miles of new 954 SAC and 221 kcmil ACSR on the new double-circuit poles
- Replace four poles with seven poles at the intersection of Bob Hope Drive and Dinah Shore Drive
- Replace one wood pole with a new double-circuit TSP at the intersection of Portola Avenue and Gerald Ford Drive
- Replace six wood poles and install one new TSP and four wood poles at the intersection of Date Palm Drive and Varner Road
- LWS pole height: approximately 65 to 80 feet in length, of which approximately 10 feet would be buried
- TSP height: approximately 70 to 100 feet tall above ground surface

Devers-Coachella Valley 220 kV Loop-In

- Install approximately 7,240 feet of single-circuit 220 kV transmission line on six new double-circuit LSTs and two
 new single-circuit LSTs. The new LSTs would be strung with single 1033 kcmil ACSR conductors on new polymer
 insulators
- Remove four LSTs and 3,770 feet of existing single-circuit 220 kV transmission line in or near the existing Devers-Coachella Valley 220 kV transmission line ROW north of the Mirage Substation
- Install one new TSP and 1,000 feet of single-circuit 220 kV transmission line at Mirage Substation and rearrange
 the Julian Hinds 220 kV transmission line from the existing LSTs on the west side of the approximately 0.8-mile
 ROW to existing LSTs on the east side of the ROW
- Install 1,540 feet of single-circuit 220 kV transmission line and remove 820 feet of single-circuit 220 kV transmission line between the 220 kV switchrack located inside Mirage Substation and the three LSTs and one TSP adjacent to the north fence of Mirage Substation
- New access: approximately 1,320 linear feet of new access or spur roads

Devers Substation

- Replace two 115 kV circuit breakers in existing Position No. 7 for the new Devers-Eisenhower-Thornhill 115 kV subtransmission line
- Replace two 115 kV circuit breakers in existing Position No. 4 for the new Mirage-Capwind-Devers-Tamarisk 115 kV subtransmission line
- Install new line protection relays

Mirage Substation

- Install one 280 MVA, 220/115 kV transformer bank, one new 220 kV bank position, one new 115 kV bank position, and one new 220 kV breaker-and-a-half configuration for two new 220 kV line positions
- Install five new 220 kV circuit breakers and five new 115 kV circuit breakers
- Relocate the existing Mirage-Ramon 220 kV transmission line, Julian Hinds-Mirage 220 kV transmission line, and Devers-Mirage 220 kV transmission line
- Loop the Devers-Coachella Valley 220 kV transmission line into the Mirage 220 kV switchrack
- Install the new Mirage-Santa Rosa 115 kV subtransmission line and relocate the existing Mirage-Concho 115 kV subtransmission line
- Install new line protection relays

TABLE ES-1 (Continued) SUMMARY OF MAJOR PROJECT COMPONENTS

Santa Rosa Substation

- Connect the Mirage-Santa Rosa-Tamarisk 115 kV subtransmission line and the new Mirage-Santa Rosa 115 kV subtransmission line
- Replace Concho-Indian Wells-Santa Rosa 115 kV line protection relays
- Install new line protection relays

Eisenhower Substation

- Relocate the existing Eisenhower-Farrell 115 kV subtransmission line from Position No. 3 to existing Position No. 2
- Convert the existing Eisenhower-Devers 115 kV subtransmission line to the reconfigured Eisenhower-Devers-Thornhill 115 kV subtransmission line into existing Position No. 2
- Install the reconfigured Eisenhower-Tamarisk 115 kV subtransmission line into existing Position No. 6
- Replace the three existing 115 kV circuit breakers in existing Position Nos. 2, 3, and 6
- Install new line protection relays

Farrell Substation

- Add one 115 kV Position No. 3 and relocate the existing Farrell-Eisenhower 115 kV subtransmission line from Position No. 6 to new Position No. 3
- Relocate the existing Farrell-Devers-Windland 115 kV subtransmission line from Position No. 7 to Position No. 6, and install the new Farrell-Garnet 115 kV subtransmission line in existing Position No. 7
- Install one new 115 kV circuit breaker
- Install new line protection relays

Garnet Substation

- Install the new Farrell-Garnet 115 kV subtransmission line
- · Install new line protection relays

Thornhill Substation

- Install the new Devers-Eisenhower-Thornhill 115 kV subtransmission line
- Install new line protection relays

Tamarisk Substation

- Convert the existing Mirage-Tamarisk 115 kV subtransmission line to the new Mirage-Santa Rosa-Tamarisk 115 kV subtransmission line
- Convert the existing Santa Rosa-Tamarisk 115 kV subtransmission line to the new Devers-Capwind–Mirage-Tamarisk 115 kV subtransmission line
- Convert the existing Tamarisk-Thornhill 115 kV subtransmission line to the reconfigured Eisenhower-Tamarisk 115 kV subtransmission line
- Replace one 115 kV circuit breaker in existing Position No. 4
- · Install new line protection relays

Concho Substation and Indian Wells Substation

· Install new line-protection relays

The Proposed Project is located in central Riverside County, as shown in Figure ES-1. The Proposed Project Electrical Needs Area includes the cities of Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, and unincorporated areas of Riverside County, including the Thousand Palms community.

SCE identified the following objectives for the Devers-Mirage 115 kV Subtransmission System Split Project:

- Serve projected electrical demand requirements in the Electrical Needs Area, beginning in 2011¹;
- Maintain electrical system reliability within the Devers 220 kV Transmission System and Electrical Needs Area;
- Enhance operational flexibility by providing the ability to transfer load between subtransmission lines and substations within the Electrical Needs Area:
- Utilize existing SCE facilities and ROWs, where feasible;
- Meet projected need while minimizing environmental impacts; and
- Meet project need in a cost-effective manner.

ES.1.2 Summary of Public Involvement Activities

On Tuesday, April 15, 2008, the CPUC published and distributed a Notice of Preparation (NOP) to advise interested local, regional, and State agencies, and interested public, that an EIR would be prepared for the Proposed Project. The NOP solicited both written and verbal comments on the EIR's scope during a 30-day comment period and provided information on the forthcoming public scoping meeting. Additionally, the NOP presented the background, purpose, description, and location of the Proposed Project, potential issues to be addressed in the EIR, and contact information for additional information regarding the project.

The CPUC published legal advertisements about the scoping period in The Desert Sun on Sunday, April 20, 2008, and Sunday, April 27, 2008, as well as The Desert Post Weekly on Thursday, April 24, 2008. Additionally, an electronic copy of the NOP was posted on the CPUC's website. The comment period extended through May 15, 2008. The public was encouraged to submit written comments on the scope, content, and format of the environmental document by mail, facsimile, or electronic mail to the CPUC.

The CPUC conducted a scoping meeting on Tuesday, April 29, 2008. The public scoping meeting was held from 6:00 p.m. to 8:00 p.m. in the Mary Stuart Rogers Gateway Building at the California State University San Bernardino Palm Desert Campus at 37-500 Cook Street, Palm Desert, California. Meeting attendees were encouraged to sign in and were provided with materials including presentation slides, a comment card, and a speaker card. Copies of the NOP were available upon request. A presentation was given at the public scoping meeting that included an overview of the environmental review process, the regional context, project background, project objectives, project description, project alternatives, and role of the public comments. Following the presentation public comments were taken and documented.

¹ This objective was modified from the objective listed in the PEA to reflect the revised project schedule.

A Scoping Report was developed for use by the public to have access to and understand the comments received during the scoping period. Appendix A to this EIR contains the Scoping Report. The report includes verbal and written public comments received during the scoping period (April 15, 2008 to May 15, 2008). The NOP, newspaper legal advertisements, and the project website notification are presented in the appendices of the Scoping Report. The CPUC used this report as a tool to ensure the preparation of a comprehensive and focused EIR. Pursuant to CEQA Guidelines Section 15082, all public comments will be considered in the EIR process.

ES.1.3 Areas of Controversy / Public Scoping Issues

The following individuals and organizations submitted written comments on the scope of the EIR:

- Native American Heritage Commission
- South Coast Air Quality Management District (SCAQMD)
- California Department of Transportation, Division of Aeronautics
- US Army Corps of Engineers
- Coachella Valley Water District
- Riverside County Transportation Department
- Thomas C. MacMaster (Individual)

In addition to written comments, oral comments were also accepted during the public meeting scoping meeting held on Tuesday, April 29, 2008. The Scoping Report in Appendix A includes all written and oral comments. The overarching themes in the written and oral comments received are as follows:

- Placement of lines underground would be preferred so that lines would be out of sight;
- Air quality emissions should be quantified and compared to SCAQMD thresholds of significance;
- Impacts to cultural and archeological resources should be addressed and the CPUC should consult with local Native American tribes or persons to get input on potential project impacts;
- Project should comply with appropriate County ordinances to avoid impacts to hydrology and water quality;
- Address consistency between the Proposed Project and the Coachella Valley Multiple Species Habitat Conservation Plan;
- Potential impacts to the Palm Springs Airport should be addressed; and
- Traffic impacts should be addressed.

ES.2 Alternatives

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

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

CEQA Guidelines (Section 15364) define feasibility as:

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

Alternatives to the Proposed Project were presented by SCE in its PEA and were developed by SCE and the EIR Team subsequent to publication of the PEA.

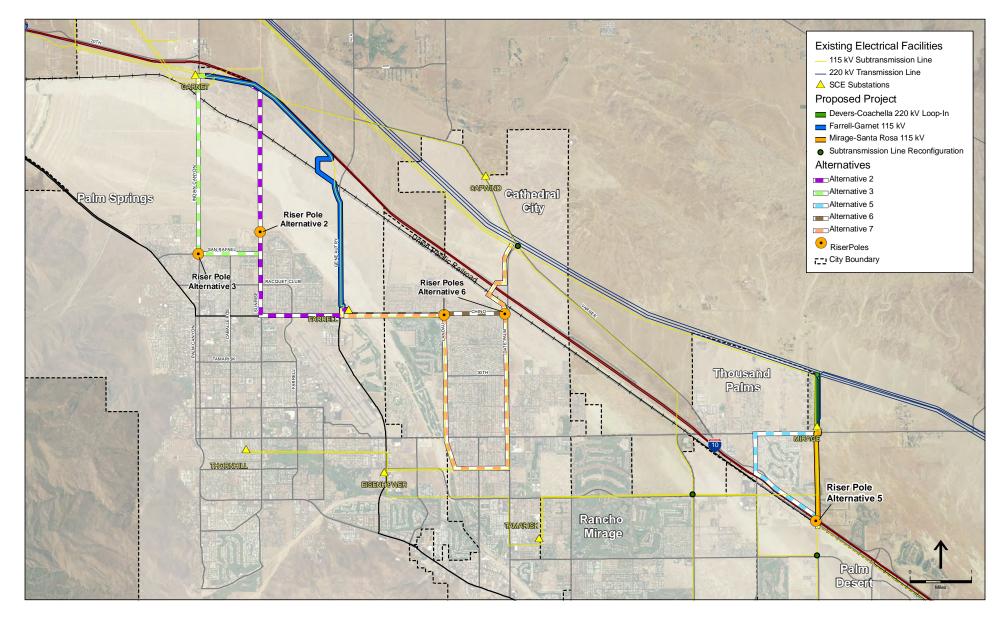
In total, the alternatives screening process culminated in the identification and screening of approximately 13 potential alternatives for SCE's Proposed Project. These alternatives range from routing adjustments for new subtransmission lines to demand-side management programs.

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

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

_

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



Devers-Mirage 115 kV Subtransmission System Split Project . 207059

ES.2.1 Alternatives Fully Evaluated in this EIR

No Project Alternative

Description. Under the No Project Alternative, the Proposed Project would not be implemented. The existing Devers 115 kV Subtransmission System would not be split and the existing Devers-Coachella Valley 220 kV transmission line would not be looped into Mirage Substation. SCE would have to design another project in order to overcome transmissions systems constraints. While it is speculative to predict the type and location or schedule of permanent development for new power plants or subtransmission and transmission lines needed to overcome such constraints, for the purpose of this EIR it is assumed that the No Project Alternative could include either or a combination of the following components: construction of new subtransmission and transmission facilities at 115 kV and 220 kV or higher voltage, possibly requiring the development of new subtransmission and transmission lines; and/or construction of additional regional power generation facilities.

Alternative 2

Description. Alternative 2 would include the construction of approximately six miles of a new underground and overhead single-circuit 115 kV subtransmission line within existing Caltrans and the City of Palm Springs road franchise locations and SCE ROW between the Farrell and Garnet substations. From Farrell Substation, the underground segment of Alternative 2 would head south on Gene Autry Trail to Vista Chino. It would then continue west along Vista Chino for approximately 1.3 miles. At Sunrise Way, the line would turn north, and proceed along Sunrise Way to Four Seasons Boulevard, where the underground segment would end and the subtransmission line would transition to overhead at a riser pole. From Four Seasons Boulevard to the intersection of the existing Devers-Farrell-Windland 115 kV subtransmission line (approximately 1.5 miles), the new overhead line would be constructed within existing SCE distribution line³ ROWs. The alignment would then turn west, within the existing Devers-Farrell-Windland 115 kV subtransmission line ROW for approximately 1.5 miles. Within the existing subtransmission line ROW, the proposed Farrell-Garnet and existing Devers-Farrell-Windland lines would be consolidated on new double-circuit support structures on the south side of I-10 to Garnet Substation.

Rationale for Full Analysis. This alternative would meet most project objectives and would meet all legal, regulatory, and technical feasibility criteria.

Alternative 3

Description. Alternative 3 would include the construction of approximately 6.5 miles of new underground and overhead single-circuit 115 kV subtransmission line within existing Caltrans and the City of Palm Springs road franchise locations and SCE ROW between the Farrell and Garnet substations. From Farrell Substation, the underground segment of Alternative 3 would

_

A distribution line is an electric power line designed at a voltage level of 50 kV of less. Distribution lines tend to provide electricity directly to electricity users.

head south on Gene Autry Trail to Vista Chino. At Vista Chino, Alternative 3 would head west for approximately 1.3 miles until reaching Sunrise Way where the line would turn north and proceed along Sunrise Way to San Rafael Road. At San Rafael Road, Alternative 3 would head west to Indian Canyon Drive, where it would turn north and continue underground for approximately 50 feet before it would rise above ground at a riser pole. North of the riser pole, the line would continue north overhead along Indian Canyon Drive within existing SCE distribution line ROW or City franchise to Garnet Substation. Along Indian Canyon Drive, the line would cross over the Whitewater River drainage adjacent to the Whitewater River Floodplain Preserve.

Rationale for Full Analysis. This alternative would meet most project objectives and would meet all legal, regulatory, and technical feasibility criteria.

Alternative 5

Description. Alternative 5 would include the construction of approximately 3.1 miles of mostly new underground single-circuit 115 kV subtransmission line within existing Riverside County road franchise locations and SCE ROW between Mirage Substation and the existing Santa Rosa-Tamarisk 115 kV line. Alternative 5 would be installed underground between the Mirage Substation and the existing Mirage-Concho 115 kV overhead transmission line. From the Mirage Substation, Alternative 5 would head south on Vista de Oro until Ramon Road, where it would turn and head west. At Monterey Avenue the alternative alignment turns and heads south to Varner Road, where it then turns southeast on Varner Road and proceeds to the point where it joins the existing Mirage-Concho 115 kV overhead subtransmission line. At this location, the underground line would rise overhead, double circuiting the Mirage-Concho 115 kV subtransmission line. Alternative 5 would cross Interstate 10 (I-10) and the Union Pacific Railroad (UPRR) on TSPs and would connect with the existing Santa Rosa-Tamarisk line south of I-10.

Rationale for Full Analysis. This alternative would meet most project objectives and would meet all legal, regulatory, and technical feasibility criteria.

Alternative 6

Description. Alternative 6 would include the construction of approximately 4.2 miles of new underground and overhead single-circuit 115 kV subtransmission line within existing Caltrans and Cathedral City road franchise locations and SCE ROW between Farrell Substation and the existing Garnet-Santa Rosa 115 kV ROW. Alternative 6 would exit Farrell Substation as an overhead line by heading south on Gene Autry Trail to Vista Chino. The line would then head east on Vista Chino approximately 1.7 miles to Landau Boulevard, where a riser pole would transition the line from overhead to underground. From Landau Boulevard, the underground line would continue east along Vista Chino traversing one mile to the existing SCE ROW of the Devers-Eisenhower 115 kV line along the west side of Date Palm Drive, where the line would transition from underground to overhead. From the intersection of Vista Chino and Date Palm Drive, the new poles would continue 1.5 miles north within existing SCE ROW and Cathedral City franchise, to the Garnet leg of the Garnet-Santa Rosa 115 kV subtransmission line.

Rationale for Full Analysis. This alternative would meet most project objectives and would meet all legal, regulatory, and technical feasibility criteria.

Alternative 7

Description. Alternative 7 would include the construction of approximately 9.1 miles of a new overhead single-circuit 115 kV subtransmission line within existing Caltrans and Cathedral City road franchise locations and SCE ROW between Farrell Substation and the existing Garnet-Santa Rosa 115 kV ROW. Alternative 7 would exit Farrell Substation as an overhead line and head south on Gene Autry Trail to Vista Chino. The line would then head east on Vista Chino for approximately 1.7 miles to Landau Boulevard, where the line would turn south and continue along Landau Boulevard for approximately 2.5 miles before reaching 33rd Street. At 33rd Street, the line would turn east and continue along 33rd Street for approximately 0.9 mile to Date Palm Drive, where the line would turn north. On Date Palm Drive the line would continue north for 4.0 miles to the existing Garnet-Santa Rosa 115 kV ROW.

Rationale for Full Analysis. This alternative would meet most project objectives and would meet all legal, regulatory, and technical feasibility criteria.

ES.3 Environmental Impacts and Mitigation Measures

ES.3.1 Impact Assessment Methodology

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

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use, Planning and Policies
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

In order to provide for a comprehensive and systematic evaluation of potential environmental consequences to the resource/issue areas, the environmental impact assessments for the Proposed

Project and alternatives are based upon a classification system, with the following four associated definitions:

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

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

Class III: Adverse impact, less than significant

Class IV: Beneficial impacts

ES.3.2 Applicant Proposed Measures

Table ES-2 lists Applicant Proposed Measures (APMs) that have been identified by SCE to minimize impacts from implementation of the Proposed Project. The impact analysis in this EIR assumes that these APMs would be implemented as part of the Proposed Project; however, if an APM would not adequately mitigate a potential project impact, a new mitigation measure was developed. In some cases, SCE's APMs have been superseded by new mitigation measures.

TABLE ES-2 APPLICANT PROPOSED MEASURES

APM AQ-1. Control Exhaust Emissions. Use ultra-low sulfur diesel fuel (e.g., fewer than 15 parts per million).

APM AQ-2. Control Exhaust Emissions. Use clean-burning on- and off-road diesel engines. Where feasible, heavy duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) will be utilized.

APM AQ-3. Control Exhaust Emissions. Construction workers will carpool when possible.

APM AQ-4. Control Exhaust Emissions. Restrict vehicle idling time to less than 10 minutes whenever possible.

APM AQ-5. Control Exhaust Emissions. Properly maintain mechanical equipment.

APM AQ-6. Minimize Diesel Particulate Matter. Use particle traps and other appropriate controls to reduce diesel particulate matter (DPM) where possible. Utilize equipment such as specialized catalytic converters (oxidation catalysts) to control approximately 20 percent of DPM, 40 percent of CO, and 50 percent of hydrocarbon emissions.

APM AQ-7. Fugitive Dust Control Measures. Implement feasible fugitive dust control measures as provided in SCAQMD Rule 403.

APM AQ-8. Construction Operations. As feasible, restrict construction operations during the morning hours and during high wind events, when NOx emissions are more likely to contribute to O₃ formation.

APM AQ-9. Construction Scheduling. Efficiently schedule staff and daily construction activities to minimize the use of unnecessary/duplicate equipment when possible.

APM AQ-10. Emissions Reduction. To reduce simultaneous project-related NOx, PM10, and PM2.5, emissions from onand off-road heavy construction equipment, given the constraints of the construction schedule, SCE shall phase project
construction, to the extent feasible, so that off-site disposal of excavated material from Proposed Project area grading and
excavation does not occur simultaneously with transmission and subtransmission line and substation construction or
upgrade activity (including, but not limited to, access road grading, excavation for tower and pole bases, crane pads, tower
and pole delivery, or tower and pole erection). During transmission and subtransmission line construction, SCE shall
phase the project construction schedule, to the extent feasible, so that grading and excavation for site access, tower and
pole bases, or crane pads do not occur simultaneously with tower or pole delivery or erection.

APM BIO-1. Preconstruction Surveys. Preconstruction biological clearance surveys will be performed to minimize impacts to special-status plant and wildlife.

APM BIO-2. Minimize Vegetation Impacts. Every effort will be made to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation will be flagged for avoidance.

APM BIO-3. Avoid Impacts to State and Federal Jurisdiction Wetlands. Construction crews will avoid impacting the streambeds and banks of streams along the route to the extent possible. If necessary, a Streambed Alteration Agreement (SAA) will be secured from the CDFG. Impacts will be mitigated based on the terms of the SAA. No streams with flowing waters capable of supporting special-status species will be expected to be impacted by the project.

APM BIO-4. BMPs. Crews will be directed to use Best Management Practices (BMPs) where applicable. These measures will be identified prior to construction and incorporated into the construction operations.

APM BIO-5. Biological Monitors. Biological monitors will be assigned to the project in areas of sensitive biological resource. The monitors will be responsible for ensuring that impacts to special status species, native vegetation, wildlife habitat, or unique resources will be avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities need to be restricted in order to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction.

APM BIO-6. Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) will be prepared. All construction crews and contractors will be required to participate in WEAP training prior to starting work on the project. The WEAP training will include a review of the special status species and other sensitive resources that could exist in the project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all trained personnel will be maintained.

APM BIO-7. Avoid Impacts to Active Nests. SCE will conduct project-wide raptor surveys and remove trees, if necessary, outside of the nesting season (nesting season is usually February 1 to August 31). If a tree or pole containing a raptor nest must be removed during nesting season, or if work is scheduled to take place in close proximity to an active nest on an existing transmission tower or pole, SCE will coordinate with the CDFG and USFWS and obtain written verification prior to moving the nest.

APM BIO-8. Avian Protection. All transmission and subtransmission towers and poles will be designed to be raptorsafe in accordance with the Suggested Practices for Raptor Protection on Power Lines: the State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).

APM BIO-9. Coachella Valley Milkvetch. Surveys for Coachella Valley milkvetch will be performed within 1 year prior to construction, between February and early May, during the plant's growing and flowering season. GPS coordinates of plant locations will be recorded with high precision (to within 1 meter) and stored in an electronic database. Plants will be marked conspicuously with pin flags and avoided during construction to the greatest extant possible. Following the completion of construction, areas compacted during temporary construction activities (e.g., lay-down areas, pulling sites) will be scarified, if deemed necessary, to enhance germination of this species.

A compensation fee for habitat loss shall be paid to BLM or a land conservation organization, as approved by the USFWS, for acquisition of replacement habitat. The agreed-upon fee amount will be \$5,000 (not to exceed \$7,246) per acre for the three acres of temporary impacts (\$15,000 total). In addition, there will also be a one-time fee of 15 percent, in the amount of \$2,250 (not to exceed \$3,261) to cover overhead costs associated with habitat acquisition. Total compensation funds will not exceed \$25,000 without the written concurrence of SCE, BLM, and the USFWS. These actions shall be coordinated with the BLM or a land conservation agency and approved by the USFWS. Funds shall be paid prior to beginning the Proposed Project and will mitigate both direct/indirect impacts of construction and operations and management.

APM BIO-10. Coachella Valley Fringe-toed Lizard. Coachella Valley fringe-toed lizards are restricted to isolated deposits of loose windblown sand associated with hummocks west and east of Gene Autry Trail (where the road crosses the UPRR tracks). The Farrell-Garnet easement in this area encompasses approximately 3.35 acres of potential habitat, of which approximately 1.0 acre was occupied by fringe-toed lizards in June 2006. While active, Coachella Valley fringe-toed lizards flee readily from danger and threats and will be inclined to move as construction activities begin. All construction work within Coachella Valley fringe-toed lizard habitat will be performed during the lizards' active season. Determination of the active season will be based on temperatures being consistently above 80 degrees Fahrenheit and the observation of activity at a nearby reference population. The active season is typically between May and September. Specific protections that SCE will implement for the Coachella Valley fringe-toed lizard are summarized as such:

- Protocol-level surveys will be conducted within 1 year of construction activities to determine presence or absence
 of Coachella Valley fringe-toed lizards.
- 2. All construction areas in Coachella Valley fringe-toed lizard habitat will be fenced and completely enclosed to keep the lizards from entering active work areas. Fencing will include fences leading up to and encircling the specific subtransmission poles where work will be performed and along the western edge of Gene Autry Trail, north along the overpass (to prevent lizards from entering the road). Silt fencing will be used and buried to a depth of 8 to 12 inches. The access end of the enclosed area shall be kept closed except to allow immediate access to equipment and personnel. An area between the existing tamarisk trees (bordering the UPRR tracks) and the northern-most pole south of the railroad tracks will remain unfenced to allow fringe-toed lizards to move back and forth.

⁴ APM BIO-8 was identified as BIO-9 in the PEA.

⁵ APM BIO-9 was identified as BIO MIT-1 in the PEA.

⁶ APM BIO-10 was identified as BIO MIT-2 in the PEA.

- 3. Qualified biologists shall conduct clearance surveys within the enclosed construction sites. Parallel transects spaced 20 feet apart will be performed within 48 hours before the initiation of construction. Surveys shall provide 100-percent coverage of the entire enclosed construction area. The area underneath shrubs and surrounding large rocks and boulders will be gently raked to expose hidden lizards. Surveys will be repeated and construction not allowed to begin until two consecutive surveys fail to reveal fringe-toed lizards.
- 4. A biological monitor will oversee all construction activities within Fringe-toed Lizard habitat. The monitor will have in their possession a federal 10(a)(1)(A) permit and associated Memorandum of Understanding (MOU) from CDFG. When a Coachella Valley fringe-toed lizard is found during surveys, the exclusionary fencing will be opened or lifted, and the lizard will be encouraged to run through the opening to the outside of the work area, after which the fencing will be closed again. Capture of fringe-toed lizards will be allowed by net, noose, or by hand only if a lizard is not moving out of the fenced project area through encouragement or of its own volition. A new pair of latex or synthetic gloves will be used for each lizard handled.
- 5. If any Coachella Valley fringe-toed lizards are captured as above, they will be released immediately to the west of the project footprint (to a distance of up to 500 feet outside the enclosed area, away from any active roadways) in loose sand contiguous with the area at which construction is occurring. The immediate area will be searched for snakes, and if found, a different microsite will be found. Fringe-toed lizards will be released in the shade of a shrub. No lizards will be in captivity or in transport for longer than 10 minutes after their initial capture within an enclosed construction area. Lizards will be transported in clean, white, plastic 5-gallon buckets.
- 6. All movement of construction vehicles outside of the ROW will be restricted to predesignated access, contractor-acquired access, or public roads.
- 7. If road stabilization is required for the temporary access roads, the materials used for stabilization will consist of temporary, easily removable material (e.g., mats laid down on sand, rather than gravel).
- 8. The real limits of construction within the ROW will be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.
- Construction and maintenance vehicles will not exceed a speed of 10 miles per hour in Coachella Valley fringetoed lizard habitat.
- 10. To the extent possible, construction operations within habitat for the Coachella Valley fringe-toed lizard shall occur when the air temperatures 1 inch above the ground in the shade are between 96 degrees and 112 degrees Fahrenheit, preferably between April 1 and October 30, contingent upon activity being observed at a nearby reference population. However, if protocol-level clearance surveys have been performed within 48 hours prior to construction, work may proceed (with a biological monitor present) outside of these parameters (e.g., construction during the evening hours).
- 11. Any spoils will be stockpiled in previously disturbed areas that have been examined for the presence of Coachella Valley fringe-toed lizards by a qualified biologist. Those areas will be fenced and cleared of lizards prior to use as in steps 1 through 5 above.
- 12. Existing sand-retaining lattice fences in the ROW will be repaired or replaced.
- 13. After construction, compacted soils will be scarified and seeded with twinbugs (Dicoria canescens) in low density.
- 14. Clearance surveys will be repeated if more than 72 hours elapse between work sessions, if any portion of a fence is removed or blown down, or if measurable rainfall occurs.

APM BIO-11. Burrowing Owl. During and prior to breeding season, preconstruction surveys will be performed in all work areas to identify areas where burrowing owls or potential burrows exist. Previously documented burrows will be revisited. Potential burrows will be searched to determine occupancy, and if vacant, will be collapsed outside of nesting season. In collaboration with CDFG and the accepted relocation strategy, occupied burrows, if any, will be fitted with exclusionary devises that allow exit, but not re-entrance, of a burrowing owl into a burrow outside of nesting season. If active burrows are located during nesting season, construction within 450 feet of the burrow will be delayed until the young have fledged.

APM CUL-1. Native American Consultations. Continued consultation and communication with interested Native American community to understand the concerns of Native American members in identifying measures that would prevent direct and indirect impacts. One such measure may include the following: if previously unidentified archaeological resources are unearthed during construction activities, construction will 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.

APM BIO-11 was identified as BIO MIT-3 in the PEA.

APM CUL-2. Discovery of Human Remains. 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. No further disturbance would occur until the county coroner makes the necessary findings as to origin, pursuant to Public Resources Code 5097.98-99, Health and Safety Code 7050.5. If the remains are determined to be Native American, then the NAHC would be notified within 24 hours, as required by Public Resources Code 5097. The Native American Heritage Commission (NAHC) would notify the designated Most Likely Descendants, who would provide recommendations for the treatment of the remains within 24 hours. The NAHC mediates any disputes regarding the treatment of remains.

APM CUL-3. Construction Monitoring. All ground-disturbing activities occurring along the Proposed Mirage-Santa Rosa 115 kV Subtransmission Line Alternative (Route 4) would be monitored by a qualified archaeologist. The route is highly sensitive for cultural resources.

APM CUL-4.8 Data Recovery Plan. An evaluation and data recovery plan shall be developed to address impacts to CA-RIV-785, 33-15429, and 33-15430.

APM CUL-5. Cultural Resources Plan. A cultural resource management plan shall be developed to prevent operational impacts to the cultural resource located between the Mirage Substation and I-10.

APM CUL-6. 10 Garnet Hills Native American Cultural Resource. Appropriate measures, if deemed necessary, would be developed in consultation with Native American community members, as recommended by the NAHC, to address potential impacts to the Garnet Hills Native American cultural resource.

APM PA-1. Paleontological Field Assessment. Conduct a paleontological field assessment of the finalized ROWs for the Proposed Project, as needed.

APM PA-2. Paleontological Resources. Prior to construction, a paleontologist would salvage known, exposed paleontological resources. This would consist of collecting standard samples of fossiliferous sediments.

APM PA-3. Paleontological Monitoring. A paleontological monitor would be present during ground-disturbing activities within areas designated as having a high possibility for the presence of paleontological resources. The monitor would be empowered to temporarily halt or redirected construction activities to ensure avoidance of adverse impacts.

APM PA-4. Salvage and Recovery of Paleontological Resources. Upon encountering a large deposit of bone, salvage of all bone in the area would be conducted in accordance with modern paleontological techniques.

APM PA-5. Transfer of Fossils to Museum. All fossils collected would be prepared to a reasonable point of identification. Itemized catalogs of all material collected and identified would be provided to a museum repository along with the specimens. A specimen repository would be arranged, in writing, with a museum prior to initiation of construction excavation.

APM PA-6. Paleontological Reporting. A report documenting the results of the monitoring and salvage activities and the significance of the fossils would be prepared.

APM GEO-1. Seismic Design for Ground Shaking. A geotechnical investigation of site soils and geologic conditions, coupled with engineering design, would identify the hazards and develop recommendations to support appropriate seismic designs to mitigate the effects of ground shaking. Specific requirements for seismic design would be based on the IEEE 693 "Recommended Practices for Seismic Design of Substations."

APM GEO-2. Subsurface Trenching. Where appropriate, subsurface trenching along active fault traces would be required to ensure tower foundations are not placed on, or immediately adjacent to, these features. In addition, tower locations would be selected to accommodate anticipated fault offset, and minimize excessive tension in lines, should a fault movement occur.

APM HAZ-1. Hazardous Materials and Waste Handling Management. Hazardous materials used and stored onsite for the proposed construction activities - as well as hazardous wastes generated onsite as a result of the proposed construction activities – would be managed according to the specifications outlined below.

Hazardous Materials and Hazardous Waste Handling: A project-specific hazardous materials management and hazardous waste management program would be developed prior to construction of the project. The program would outline proper hazardous materials use, storage, and disposal requirements, as well as hazardous waste management procedures. The program would identify types of hazardous materials to be used during the project and the types of wastes that would be generated. All project personnel would be provided with project-specific training. This program would be developed to ensure that all hazardous materials and wastes are handled in a safe and environmentally sound manner. Hazardous wastes would be handled and disposed of according to applicable rules and regulations. Employees handling wastes would receive hazardous materials training and shall be trained in hazardous waste

⁸ APM CUL-4 was identified as CUL-MIT-1 in the PEA.

⁹ APM CUL-5 was identified as CUL-MIT-2 in the PEA.

APM CUL-6 was identified as CUL-MIT-3 in the PEA.

procedures, spill contingencies, waste minimization procedures and Treatment, Storage, and Disposal Facility (TSDF) training in accordance with OSHA Hazard Communication Standard and 22 CCR. SCE would use landfill facilities that are authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b).

- Construction Stormwater Pollution Prevention Plan (SWPPP): A project-specific construction SWPPP would be prepared and implemented prior to the start of construction of the Proposed Project. The SWPPP would utilize BMPs to address the storage and handling of hazardous materials and sediment runoff during construction activities.
- Transport of Hazardous Materials: Hazardous materials that would be transported by truck include fuel (diesel fuel
 and gasoline) and oil and lubricants for equipment. Containers used to stored hazardous materials would be
 properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used
 would be established in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified
 transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations.
- Fueling and Maintenance of Construction Equipment: Written procedures for fueling and maintenance of construction equipment would be prepared prior to construction. Vehicles and equipment would be refueled onsite or by tanker trucks. Procedures would include the use of drop cloths made of plastic, drip pans, and trays, to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling stations would be located in designated areas where absorbent pads and trays would be available. The fuel tanks also would contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials, such as paints, solvents, and penetrants, would be kept in an approved locker or storage cabinet.
- Emergency Release Response Procedures: An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. It would prescribe hazardous materials handling procedures for reducing the potential for a spill during construction and would include an emergency response program to ensure quick and safe cleanup of accidental spills. All hazardous materials spills or threatened release, including petroleum products such as gasoline, diesel, and hydraulic fluid, regardless of the quantity spilled, would be immediately reported if the spill has entered a navigable water, stream, lake, wetland, or storm drain, if the spill impacted any sensitive area including conservation areas and wildlife preserved, or if the spill caused injury to a person or threatens injury to public health. All construction personnel, including environmental monitors, would be aware of state and federal emergency response reporting guidelines.

APM HAZ-2. Fire Management Plan. The Fire Management Plan would be developed by SCE prior to start of construction.

APM HAZ-3. Spill Prevention, Counter Measure, and Control Plan (SPCC). In accordance with Title 40 of the CFR, Part 112, SCE would prepare an updated SPCC for appropriate substations within the Proposed Project. The plans would include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup.

APM HAZ-4. Hazardous Materials Business Plan (HMBPs). SCE would prepare and submit an updated HMBP for appropriate substations within the Proposed Project. The required documentation would be submitted to the Certified Unified Program Agency (CUPA). The HMBPs would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment.

APM HYDRO-1. Grading Activities. Grading activities would not commence if heavy rain is forecasted for the period of time of major earthmoving activities through compaction and stabilization of the site.

APM HYDRO-2A. Erosion Control and Drainage Plan. An engineered erosion control and drainage plan would be developed as part of the site grading plan. The plan would be developed in accordance with the County of Riverside Hydrology Manual and would address all construction activities associated with the project. The location of the discharge of site runoff for construction would be defined in final engineering and in consultation with Riverside County, the RWQCB, and the CDFG.

APM HYDRO-2B. Construction Erosion Control Plan. SCE shall develop an erosion control plan incorporating construction-phase measures to limit and control erosion and siltation. The erosion control plan shall include components such as phasing of grading, limiting areas of disturbance, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection, and provision for revegetation or mulching. The plan shall also prescribe treatment measures to trap sediment once it has been mobilized, at a scale and density appropriate to the size and slope of the catchment.

APM HYDRO-2C. Environmental Training Program. An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, to all field personnel involved in the construction of the Proposed Project elements. A monitoring program would be implemented to ensure that the plans are followed throughout the period of construction.

APM HYDRO-3. Access Road Location. Prior to final engineering of the proposed access road, SCE would consult with Riverside County, CDFG, and the RWQCB regarding the location of the access road.

APM HYDRO-4. Hazardous Substance Control and Emergency Response Plan. SCE would prepare a Hazardous Substance Control and Emergency Response Plan, which would include preparations for quick and safe cleanup of accidental spills. This plan would be submitted to agencies with the grading permit application. It would prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan would identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, would be permitted. Oilabsorbent materials, tarps, and storage drums would be used to contain and control any minor releases of mineral oil.

APM LU-1. Aeronautical Considerations. As indicated in the Study of Aeronautical Considerations (2007), SCE would submit notice to the FAA electronically, in accordance with FAA procedures and as far in advance of construction as possible.

APM NOISE-1. Noise Ordinances. SCE would comply with all applicable noise ordinance construction schedules. In the event the construction must occur outside the allowable work hours, a variance would be obtained.

APM NOISE-2. Noise Control Equipment Maintenance. Maintain all noise-control equipment in good working order, in accordance with manufacturers' specifications.

APM NOISE-3. Handling of Noise Complaints. During construction, investigate, document, evaluate, and attempt to resolve legitimate project-related noise complaints. This would involve attempting to contact the source (person or persons) of the noise complaint within 24 hours; investigating to determine the project noise source(s) that led to the complaint; and taking all feasible measures to reduce the noise at the source, if the complaint is legitimate.

APM REC-1. Recreation Area Closures. When temporary short-term closures to recreational areas are necessary for construction activities, SCE would coordinate those closures with recreational facility owners. To the extent practicable, SCE would schedule construction activities to avoid heavy recreational use periods (e.g., holidays or tournaments). SCE would post notice of the closure onsite 14 calendar days prior to the closure.

APM TRA-1. Obtain Permits. If any work requires modifications or activities within local roadway ROWs, appropriate permits will be obtained prior to the commencement of construction activities, including any necessary local permits and encroachment permits.

APM TRA-2. Traffic Management and Control Plans. Traffic control and other management plans will be prepared where necessary to minimize project impacts on local streets.

APM TRA-3. Minimize Street Use. Construction activities will be designed to minimize work on or use of local streets.

APM PUSVC-01. Work Around High Pressure Gas Lines. No mechanical equipment will be permitted to operate within 3 feet of the Southern California Gas Company high-pressure pipelines, and any closer work must be done by hand.

APM PUSVC-02. Monitoring by the Southern California Gas Company. A representative of the Southern California Gas Company must observe the excavation around or near their facilities to insure protection and to record pertinent data necessary for their operations.

ES.3.3 Mitigation Measures

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

ES.3.4 Findings

An overview of environmental impacts by resource area is provided below based on the detailed impact finding and mitigation measures for the Proposed Project and alternatives provided in Chapter 4, *Environmental Analysis*. Tables ES-5 and ES-6, at the end of this Executive Summary, provide a more detailed summary of all the environmental impacts and mitigation measures for the Proposed Project and alternatives.

No Impact, Less than Significant, and Less than Significant with Mitigation

For the Proposed Project and alternatives, based on technical review and evaluation against the environmental and regulatory setting, the following environmental impacts were determined to have no impact, be less than significant, or less than significant with mitigation (i.e., No Impact, Class III, or Class II, respectively).

- Aesthetics
- Agricultural Resources
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Planning and Policies

- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

Significant Unmitigable

As summarized in Table ES-3, environmental impacts to air quality from construction of the Proposed Project as well as Alternatives 2, 3, 5, 6, and 7 would be significant and unmitigable (Class I), even with implementation of feasible mitigation measures.

TABLE ES-3
SUMMARY OF SIGNIFICANT UNMITIGABLE (CLASS I) ENVIRONMENTAL IMPACTS OF THE DEVERS-MIRAGE 115KV SUBTRANSMISSION SYSTEM SPLIT PROJECT AND ALTERNATIVES

Alternative	Significant (Class I) Impacts
Proposed Project	The Proposed Project would result in temporary significant and unmitigable impacts to regional and local air quality during construction activities.
Class I Impacts Eliminated or	r Created by Alternatives
Alternative 2	Same significant and unmitigable impacts to air quality during construction. Impacts may be slightly more adverse due to trenching requirements for the approximately three-mile long underground segment.
Alternative 3	Same significant unmitigable impacts to air quality during construction. Impacts may be slightly more adverse due to trenching requirements for the approximately 3.6-mile long underground segment.
Alternative 5	Same significant unmitigable impacts to air quality during construction. Impacts may be slightly more adverse due to trenching requirements for the approximately three-mile long underground segment.
Alternative 6	Same significant unmitigable impacts to air quality during construction. Impacts may be slightly more adverse due to trenching requirements for the approximately one-mile long underground segment.
Alternative 7	Same significant unmitigable impacts to air quality during construction. Impacts may be slightly more adverse due to greater length of subtransmission line construction required under this alternative.

ES.4 Summary Comparison of the Proposed Project and Alternatives

ES.4.1 Methodology

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

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

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

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

As shown in Table ES-3, construction of the Proposed Project would result in significant and unmitigable impacts to air quality. These significant and unmitigable impacts were also identified for each of the five alternatives.

ES.4.3 Environmentally Superior Alternative

Table ES-3 summarizes the environmental impact conclusions of the Proposed Project and alternatives. Implementation of the Proposed Project and all five alternatives would result in significant and unmitigable (Class I) impacts on air quality during construction. Although impacts to air quality would be of varying degrees (i.e., alternatives with an underground component would be slightly more adverse than the Proposed Project due to emissions during trenching activities), the impacts would be short term and temporary in nature; therefore, impacts of slightly varying degree between alternatives is not material enough to determine a preferred alternative from an air quality perspective.

However, impacts to aesthetics, biological resources, cultural resources, and traffic and transportation, while all mitigable to less than significant, do vary enough to determine a preferred alternative from the perspective of these issue areas. Consequently, the selection of an Environmentally Superior Alternative is based on differences in intensity and type of impacts that would be less than significant with mitigation. Based on these differences the identified Environmentally Superior Alternative for the Farrell-Garnett study area is Alternative 3 and the identified Environmentally Superior Alternative for the Mirage-Santa Rosa study area is Alternative 5.

ES.4.4 Environmentally Superior Alternative vs. No Project Alternative

The Environmentally Superior Alternatives (Alternatives 3 and 5) would reduce long-term aesthetics and biological resources impacts and would have minimal long-term impacts on residences or other sensitive land uses. Under the No Project Alternative scenario, SCE may be required to construct new subtransmission and transmission lines and/or additional power generation in or near the study area to supply power to the Electrical Needs Area. It would be overly speculative for this EIR to assume where the new subtransmission and transmission facilities and/or power generation facilities would be sited; however, it is reasonable to assume that at a minimum, environmental impacts associated with the No Project Alternative scenario would not be less than those from the Environmentally Superior Alternatives. Therefore, the Environmentally Superior Alternative are preferred over the No Project Alternative.

ES.5 Impact Summary Tables

Tables ES-5 and ES-6 on the following pages summarize all identified impacts of the Proposed Project (Table ES-5) and alternatives (Table ES-6). For each impact, the following information is provided: impact number and title, impact class (e.g., Class I, II, III, IV), applicable mitigation measure(s), and residual impact (whether significant or less than significant).

ES.6 References

Southern California Edison (SCE), 2008. Proponent's Environmental Assessment for the Devers-Mirage 115 kV Subtransmission System Split Project, January 2008.

TABLE ES-4
DEVERS-MIRAGE 115KV SUBTRANSMISSION SYSTEM SPLIT PROJECT VS. ALTERNATIVES
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS

	SUMMART OF ENVIRONMENTAL IMPACT CONCLUSIONS								
Issue Area	Proposed Project	Alternative 2	Alternative 3	Alternative 5	Alternative 6	Alternative 7			
Aesthetics	Proposed Mirage- Santa Rosa line would have more of an impact than Alternative 5.		Least impact for the Farrell- Garnet study area.	Less of an impact than the proposed Mirage-Santa Rosa line.		Most impact for the Farrell- Garnet study area.			
Agriculture	No	No	No	No	No	No			
Resources	Preference	Preference	Preference	Preference	Preference	Preference			
Air Quality	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Biological Resources	Most for the Farrell- Garnet and Mirage- Santa Rosa study areas.		Least impacts for the Farrell- Garnet study area.	Less impacts than the proposed Mirage- Santa Rosa line.					
Cultural Resources	Most impacts for the Farrell- Garnet and Mirage- Santa Rosa study areas.			Less impacts than the proposed Mirage- Santa Rosa line.		Least impacts on cultural resources for the Farrell-Garnet study area.			
Geology and Soils	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Hazards / Hazardous	No	No	No	No	No	No			
Materials	Preference	Preference	Preference	Preference	Preference	Preference			
Hydrology and Water	No	No	No	No	No	No			
Quality	Preference	Preference	Preference	Preference	Preference	Preference			
Land Use, Planning and Policies	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Minerals	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Noise	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Population and Housing	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Public Services	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Recreation	No	No	No	No	No	No			
	Preference	Preference	Preference	Preference	Preference	Preference			
Transportation and Traffic	Least impacts for the Farrell- Garnet and Mirage- Santa Rosa study areas.		Most impacts for the Farrell- Garnet study area.	More impacts to than the proposed Mirage-Santa Rosa line.					
Utilities and Service	No	No	No	No	No	No			
Systems	Preference	Preference	Preference	Preference	Preference	Preference			

TABLE ES-5
SUMMARY OF IMPACTS AND MITIGATION FOR THE DEVERS-MIRAGE 115KV SUBTRANSMISSION SYSTEM SPLIT PROJECT

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact
Aesthetics			
4.1-1: Degrade scenic resources along State Route 111	Class III	None required	Less than Significant
4.1-2: Temporary visual impacts from construction staging areas	Class III	None required	Less than Significant
4.1-3: Temporary visual impacts from pulling/splicing sites	Class II	4.1-3: Limit time equipment is on site and clean up and restore site in accordance with SWPPP	Less than Significant
4.1-4: Temporary visual impacts from substation modifications	Class III	None required	Less than Significant
4.1-5: Degrade existing visual character	Class III	None required	Less than Significant
4.1-6: Temporary impacts to nighttime views from construction night lighting	Class II	4.1-6: Reduce construction night lighting impacts	Less than Significant
4.1-7: Create new sources of glare associated with conductors	Class II	4.1-7: Use non-specular conductors	Less than Significant
4.1-8: Create new sources of glare associated with substation modifications	Class II	4.1-8: Apply a non-reflective or weathered finish to all new structures and equipment at substations	Less than Significant
Agriculture Resources			ĺ
4.2-1: Impacts to Farmland of Local Importance	Class III	None required	Less than significant
Air Quality			ĺ
4.3-1: Temporary criteria pollutant emissions from construction	Class I	4.3-1a: Fugitive dust control plan4.3-1b: Exhaust emissions control plan	Significant unmitigable
4.3-2: Long-term criteria pollutant emissions from project operation	Class III	None required	Less than significant
4.3-3: Cumulatively considerable criteria pollutant emissions during construction	Class I	Implement Mitigation Measures 4.3-1a and 4.3-1b	Significant unmitigable
4.3-4: Temporary exposure of sensitive receptors to harmful concentrations of criteria pollutants during construction	Class I	Implement Mitigation Measures 4.3-1a and 4.3-1b	Significant unmitigable
4.3-5: Create objectionable odors during construction	Class III	None required	Less than significant
4.3-6: Generate short-term and long-term emissions of GHGs	Class II	4.3-6: Implement a GHG emissions offset program	Less than significant

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

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact
Biological Resources			
4.4-1: Construction impacts to Coachella Valley milkvetch	Class II	4.4-1: Conduct pre-construction surveys for Coachella Valley milkvetch and minimize impacts to habitat; where impacts cannot be minimized, replace habitat	Less than Significant
4.4-2: Construction impacts to Coachella Valley fringe-toed lizard and flat-tailed horned lizard	Class II	4.4-2: Minimize impacts to Coachella Valley fringe-toed lizard; where impacts cannot be minimized, replace habitat	Less than Significant
4.4-3: Construction impacts to Palm Springs round-tailed ground squirrel	Class II	4.4-3: Avoid impacts to Palm Springs round-tailed ground squirrel burrow colonies	Less than Significant
4.4-4: Construction impacts to Coachella Valley giant sand-treader cricket	Class II	Implement Mitigation Measures 4.4-1 and 4.4-2.	Less than Significant
4.4-5: Construction impacts to native, nesting birds	Class II	4.4-5: Avoid impacts to nesting raptors or other protected birds during construction activities scheduled during breeding season	Less than Significant
4.4-6: Construction impacts to burrowing owl	Class II	4.4-6: Survey for burrows prior to construction and minimize impacts to occupied burrows	Less than Significant
4.4-7: Impacts to raptors as a result of electrocution or collision	Class III	None required	Less than Significant
4.4-8: Increased predation on special status-species as a result of predatory bird perching	Class II	4.4-8: Install anti-perching devices	Less than Significant
4.4-9: Impacts to sand fields	Class II	Implement Mitigation Measure 4.4-1 and 4.4-2	Less than Significant
4.4-10: Impacts to jurisdictional waters of the US and waters of the State, including drainages and wetlands	Class II	4.4-10: Perform a wetland delineation and minimize or offset impacts to wetlands	Less than Significant
4.4-11: Interference with migratory bird movement	Class III	None required	Less than Significant
4.4-12: Conflict with the Coachella Valley Multiple Species Conservation Plan	Class II	Implement Mitigation Measures 4.4-1, 4.4-2, 4.4-3, 4.4-4, 4.4-5, 4.4-6, 4.4-8 and 4.4-10	Less than Significant
Cultural Resources			
4.5-1: Impacts to historic site 33-8408, Varner Road	Class III	None required	Less than Significant
4.5-2: Impacts to Hoon wit ten ca va (Garnet Hill)	Class II	4.5-2: Consult with Native American community member regarding Hoon wit ten ca va (Garnet Hill)	Less than Significant

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact
Cultural Resources (cont.)			
4.5-3: Impacts to cultural resources CA-RIV-785, 33-15439, and 33-15430	Class II	 4.5-3a: Avoid and protect archeological resources 4.5-3b: Prepare a treatment plan if avoidance is not feasible 4.5-3c: Assign a Native American monitor for all ground-disturbing activities along the Mirage-Santa Rosa 115 kV subtransmission line alignment 	Less than Significant
4.5-4: Impacts to currently unknown cultural resources	Class II 4-5-4a: Cease work if a cultural resources is discovered until a qualified archeologist has assessed the resources 4.5-4b: Retain an archeologist meeting the Secretary of the Interior's Professional Qualification Standards to oversee implementation of mitigation measures 4.5-4c: Survey all previously unsurveyed portions of the line prior to ground disturbing activities		Less than Significant
4.5-5: Impacts to unidentified paleontological resources	Class III	None required	Less than Significant
4.5-6: Disturbance of human remains	Class III	None required	Less than Significant
Geology and Soils			ĺ
4.6-1: Hazards from ground surface rupture	Class III	None required	Less than significant
4.6-2: Effects from seismic ground shaking	Class III	None required	Less than significant
4.6-3: Effects from seismic-related ground failure, including liquefaction	Class III	None required	Less than significant
4.6-4: Erosion or loss of topsoil from ground disturbance	Class III	None required	Less than significant
4.6-5: Hazards from lateral spreading, subsidence, or collapse	Class III	None required	Less than significant
4.6-6: Risk from expansive soils	Class III	None required	Less than significant
Hazards / Hazardous Materials			
4.7-1: Use of hazardous materials during construction	Class III	None required	Less than significant
4.7-2: Use of hazardous materials during operations	Class III	None required	Less than significant
4.7-3: Release previously unidentified hazardous materials	Class II	4.7-3: Include provisions in the Hazardous Substance Control and Emergency Response Plan to address hazardous materials encountered during construction	Less than significant

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact	
Hazards / Hazardous Materials (cont.)				
4.7-4: Release of hazardous materials near existing schools	Class III	None required	Less than significant	
4.7-5: Potential impacts to airport operations	Class III	None required	Less than significant	
4.7-6: Interference with an emergency response or evacuation plan	Class III	None required	Less than significant	
4.7-7: Construction and operational related wildland fires	Class II	4.7-7: Requires specific provisions for the Fire Management Plan required pursuant to APM HAZ-2.	Less than significant	
Hydrology and Water Quality				
4.8-1: Soil erosion, sedimentation and/or pollution in surface waterways from construction activities	Class III	None required	Less than significant	
4.8-2: Soil erosion, sedimentation and/or pollution in surface waterways from operation and maintenance activities	Class III	None required	Less than significant	
4.8-3: Affect local underground aquifer by introducing impervious surfaces	Class III	None required	Less than significant	
4.8-4: Impact local drainage patterns	Class II	4.8-4a: Check daily weather forecasts during construction in Whitewater River Wash4.8-4b: Contour post-construction topography and gradient of Whitewater River Wash to match pre-construction conditions	Less than significant	
4.8-5: Impede or redirect flood flows	Class III	None required	Less than significant	
Land Use, Planning and Policies				
4.9-1: Divide an established community	Class III	None required	Less than Significant	
4.9-2: Conflict with applicable land use plans, policies or regulations	Class III	None required	Less than Significant	
4.9-3: Conflict with the Coachella Valley Multiple Species Conservation Plan	Class II	Implement Mitigation Measures 4.4-1, 4.4-2, 4.4-3, 4.4-5, 4.4-6, 4.4-8 and 4.4-10	Less than Significant	
Mineral Resources				

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact
Noise			
4.11-1: Exceed noise standards from corona noise	Class III	None required	Less than Significant
4.11-2: Exceed noise standards from transformer at Mirage Substation	Class II	4.11-2: Implement measures to ensure that transformer noise levels do not exceed the Riverside County noise standards for stationary sources	Less than Significant
4.11-3: Expose people to substantial vibration levels from construction	Class III	None required	Less than Significant
4.11-4: Permanently increase ambient noise levels from corona noise	Class III	None required	Less than Significant
4.11-5: Permanently increase ambient noise levels from transformer noise	Class II	Implement Mitigation Measure 4.11-2	Less than Significant
4.11-6: Generate adverse noise levels during construction	Class II	4.11-6a: Employ noise reduction and suppression techniques 4.11-6b: Prepare a nighttime noise reduction plan	Less than Significant
4.11-7: Expose nearby receptors to periodic increases in ambient noise levels	Class III	None required	Less than Significant
Population and Housing			
No impacts to population and housing identified.			
Public Services			
4.13-1: Demand for fire protection	Class II	4.13-1: Prepare and implement a Health and Safety Plan	Less than Significant
4.13-2: Emergency vehicle response times	Class II	4.13-2: Coordinate with emergency service providers	Less than Significant
4.13-3: Demand for police services	Class III	None required	Less than Significant
Recreation			
4.14-1: Construction impacts to Tri-Palm Golf Course	Class III	None required	Less than Significant
Transportation and Traffic			
4.15-1: Construction effects on traffic	Class II	4.15-1: Prepare/implement a traffic management plan	Less than Significant
4.15-2: Construction traffic safety hazards	Class II	Implement Mitigation Measure 4.15-1	Less than Significant
4.15-3: Construction delays for emergency vehicles	Class II	Implement Mitigation Measure 4.15-1 and 4.13-2	Less than Significant
4.15-4: Inadequate parking	Class III	None required	Less than Significant

Impact	Impact Class ^a	Mitigation Measure(s)	Residual Impact	
Utilities and Service Systems				
4.16-1: Contact underground utility lines or facilities during construction	Class III	None required	Less than Significant	

TABLE ES-6 SUMMARY OF IMPACTS AND MITIGATION FOR THE ALTERNATIVE ROUTES

Impact Class 12 Applicable Alternatives Mitigation Measure(s) Impact Impact

Aesthetics

No unique impacts to aesthetics have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Agriculture Resources

No unique impacts to agricultural resources have been identified for the alternatives; impacts would be the same as those associated with the Proposed Project.

Air Quality

No unique impacts to air quality have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Biological Resources

No unique impacts to biological resources have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Cultural Resources

Except as noted below, cultural resources impacts and mitigation measures are the same as for the Proposed Project.

4.5-ALT5-1: Impacts to historic site 33-8409, Varner Road

Class III

ALT5

None required

Less than Significant

Geology and Soils

No unique impacts related to geology and soils have been identified for the alternatives; impacts would be the same as those associated with the Proposed Project.

Hazards / Hazardous Materials

No unique impacts related to hazards and hazardous materials have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Hydrology and Water Quality

No unique impacts related to hydrology and water quality have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Land Use, Planning and Policies

No unique impacts related to land use, planning and policies have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

¹² Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

TABLE ES-6 (Continued) SUMMARY OF IMPACTS AND MITIGATION FOR THE ALTERNATIVE ROUTES

		Applicable		Residual
Impact	Impact Class ¹²	Alternatives	Mitigation Measure(s)	Impact

Mineral Resources

No impacts to mineral resources have been identified for the alternatives.

Noise

No unique impacts related to noise have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Population and Housing

No impacts to population and housing have been identified for the alternatives.

Public Services

No unique impacts related to public services have been identified for the alternatives; impacts and mitigation measures would be the same as those associated with the Proposed Project.

Recreation

No unique impacts related to recreation have been identified for the alternatives; impacts would be the same as those associated with the Proposed Project.

Transportation and Traffic Except as noted below, Transportation and Traffic impacts and mitigation measures are the same as for the Proposed Project. 4.15-ALT_-1: Underground line construction activity effects on traffic Class II ALT2, ALT3, ALT5, ALT6 trenches at the end of each workday and implement a circulation and detour plan Less than Significant

ALT2, ALT3,

ALT5, ALT6

4.15-ALT_-2: Repair damaged

roadways to original conditions

Utilities and Service Systems

trenching activities

No unique impacts related to public services have been identified for the alternatives; impacts would be the same as those associated with the Proposed Project.

Class II

4.15-ALT_-2: Damage to roadways from

Less than

Significant