4. Revisions to the Draft EIR

This chapter presents the revisions made to the Draft Environmental Impact Report (EIR) in response to comments. The changes and additions to the Draft EIR do not raise important new issues about significant effects on the environment. The changes are "insignificant" as defined in Section 15088.5 of the California Environmental Quality Act (CEQA). Revisions to the Draft EIR are organized by section and page number. Revisions are denoted by strikethrough (strikethrough) where existing text was removed and underline (underline) where text was added.

4.1 Executive Summary

• Page ES-1:

The Project would enable <u>Southern California Edison (SCE</u>; the Applicant) to build necessary electrical facilities to maintain safe and reliable service for their customers and to meet the forecasted demand for electricity in the Valley-Ivyglen and Fogarty Electrical Needs Areas. Under the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Council (NERC), Western Electricity Coordinating Council (WECC), and CPUC rules, guidelines, and regulations, electrical transmission systems must have sufficient capacity to maintain safe and reliable service to customers. System safety and reliability must be maintained under normal conditions, when all facilities are in service, as well as under abnormal conditions. Abnormal conditions result from equipment or line failures, maintenance outages, or emergency outages that cannot be predicted or controlled.

• Page ES-5:

Construction and operation of the Project will generate Nitrogen Oxide (NOX) and Particulate Matter (PM10) emissions that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds and would therefore have a significant impact on air quality in the South Coast Air Basin (SCAB). In addition, construction and operation of the Project would generate greenhouse gases (GHG) that exceed baseline emissions in Riverside County. The main contributors to these violations during construction and operation are employee vehicles, bore/drill rigs, cranes, backhoes, crawlers, and circuit breakers. These GHG emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and sulfur hexafluoride (SF6), will be mitigated through the purchase of carbon offsets, but will have a significant impact. Construction and operational GHG emissions will be mitigated through the purchase of carbon offsets., and will also have a significant impact. Although the violations of NOX and PM10 could potentially be mitigated, without additional information on the on road and off road equipment specifications to be used during construction and operation, quantifiable reduction of these emissions based on SCAQMD guidance is unknown.

The SCAQMD has released interim criteria for assessing the significance of GHG emissions, but instead of using the interim criteria, the CPUC has taken a "net zero" GHG threshold approach for the Project. This means that any activity resulting in GHG emissions from the construction or operation and maintenance of the Project is to be considered significant. In addition, Hence, even though construction emissions would be short term, the impact to on air quality and GHGs released in the SCAB would remain be significant (Class I).

• Page ES-7:

A network of new access roads would be needed to construct Alternative 2 through mountainous terrain along the existing 500 kV ROW. as this ROW is not regularly maintained.

• Page ES-8:

Alternative 5 consists of two geographically separated portions of the subtransmission route—the Warm Springs and Pacific Clay portions. The Warm Springs portion of Alternative 5 would connect segments C-1 in the Central Region to segment W-1A in the Western Region. This comprises segments C-8A, C-8B, C-8C, C8-D, C-8E and C-9A, C-9B, C-9C, C9-D, C-9E (Figure C.2-6). The Pacific Clay portion of Alternative 5 would connect W-1A to W-4 in the Western Region and comprises segments W-13A, W-13B, W-13C, W-13D, W-14A, W-14B, <u>W-3A</u>, and W-3B (Figure C.2-7). Combined, these segments make up a complete route between the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations and still maintain a route that would serve the Valley-Ivyglen and Fogarty Electrical Needs Areas. Alternative 5 would cross over or extend along Highway I-15 and SR-74, both of which are Eligible Scenic Highways, although they are not officially designated at this time. Class I Land Use and Visual impacts would remain with Alternative 5, however Class I impacts to mineral resources would be avoided.

• Page ES-9:

<u>Alternative 6: Construct the subtransmission line along segments E-2, C-8, C-9, W-3,</u> <u>W-13, and W-14 (Eastern Region Route Segment Alternative)</u>

Construct a new 115 kV subtransmission line as described under Alternative 5 but use alternative route segment E-2 instead of E-1 (Figures C.2-3, C.2-4, and C.2-5). Segment E-2 would start at the Valley Substation and end at the same point on SR-74 as segment E-1 (the Project). Segment E-2 is approximately 1.8 miles longer than segment E-1.

• Pages ES-20 to ES-21:

Refer to the revisions made to MM GEO-1a, MM GEO-2a, and MM GEO-3a in Section 4.5. In addition, MM GEO-1c and MM GEO-1d were deleted.

• Pages ES-22 to ES-25:

Refer to the revisions made to the analysis of Impact HYD-3 on pages D.7-16 and D.7-18 in Section 4.5.

• Page ES-26:

MM HAZ-6a was deleted. Refer to the revision to page D.8-18 of the Draft EIR (Final EIR Section 4.5).

• Page ES-32:

Impact NOISE-2: Excessive Ground-Bourne Groundborne Vibrations or Ground-Bourne Groundborne Noise Levels

4.2 Chapter A: Introduction

• Page A-2:

The purpose of the Project is to build necessary electrical facilities to maintain safe and reliable service to the Applicant's customers and to meet the forecasted demand for electricity in the Electrical Needs Area. The Applicant's current forecast shows that the existing subtransmission facilities serving the Electrical Needs Area will exceed designed operating limits as early as 2010 2012. Under the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Council (NERC), Western Electricity Coordinating Council (WECC), and CPUC rules, guidelines, and regulations, electrical transmission systems must have sufficient capacity to maintain safe and reliable service to customers. System safety and reliability must be maintained under normal conditions, when all facilities are in service, as well as under abnormal conditions. Abnormal conditions result from equipment or line failures, maintenance outages, or emergency outages that cannot be predicted or controlled.

• Page A-8:

The combined operating capacity of the two substations is presently limited to 100.7 MVA under normal operating conditions. Dryden 33/12 kV Substation was constructed as a temporary facility to assist in serving the existing load and to accommodate the load that was transferred from Centex Substation in 2007. Centex Substation reached capacity in 2005 and has since been removed from service. The designed capacity of Dryden Substation is not sufficient to reliably serve future demand of this Electrical Needs Area. Dryden Substation will therefore be removed once permanent facilities are constructed. The removal process is described in Chapter B Project Description.

• Page A-8:

In 2008, the normal condition peak demand for Dryden and Elsinore Substations was collectively 90.8 MVA. The 2008 peak demand, as adjusted for a 1-in-10 year heat storm, was 96.6 93 MVA (Table A.1-1). From 2010 to 2017, the Applicant projects that the normal condition peak demand will increase. at an average annual growth rate of 5.5 percent over the next 10 years. Table A.1-1 shows the existing capacity limits and forecasted peak demand projections for both normal and abnormal 1-in-10 year heat storm conditions.

Table A. 1-1 Planned Capacity and Projected Demand (<u>Dryden and Eisinore Substations, Combined)</u>							
Planned Capacity and Projected Demand	2008	2009	2010	2011	2012		
Planned Maximum Operating Limit (MVA)	100.7	100.7	100.7	100.7	100.7		
Projected Peak Demand 1-in-10 Year Heat Storm (MVA)		108.5	114.3	119.1	123.9		
		<u>97</u>	88	<u>93</u>	<u>98</u>		
Planned Capacity and Projected Demand	2013	2014	2015	2016	2017		
Planned Maximum Operating Limit (MVA)	100.7	100.7	100.7	100.7	100.7		
Projected Deak Demand 1 in 10 Year Heat Storm (MVA)	128.7	133.4	138.2	143.0	144.1		
Projected Peak Demand 1-in-10 Year Heat Storm (MVA)		108	<u>112</u>	<u>116</u>	<u>120</u>		
Planned Capacity and Projected Demand	<u>2018</u>	<u>2019</u>	<u>2020</u>				
Planned Maximum Operating Limit (MVA)	100.7	100.7	100.7				
Projected Peak Demand 1-in-10 Year Heat Storm (MVA)	<u>123</u>	<u>127</u>	<u>131</u>				
	•	•		-			

Table A.1-1 Planned Capacity and Projected Demand (Dryden and Elsinore Substations, Combined)

Source: SCE 2010

• Page A-13:

By 2010 2013, the peak demand for a 1-in-10 year heat storm is forecast to be 114.3 103 MVA and The projected electrical demand for 2010 to exceeds the operating limits of the existing transformers at the Dryden and Elsinore Substations (Table A.1-1). Unless system upgrades are installed, the Applicant projects that by 2010, Dryden and Elsinore Substations will exceed their maximum ratings under both normal and abnormal operating conditions.

• Page A-13:

At the present time, the amount of electrical power that can be delivered to the Valley-Ivyglen Electrical Needs Area is limited to the maximum amount of electrical power that the Valley-Elsinore-Ivyglen line can transmit before its operating limits are exceeded. The capacity of this line is presently limited to 183 184 megavolt amperes (MVA) under normal operating conditions (Table A.1-2). The Applicant forecasts the loading on subtransmission lines by summing the peak demand at each of the substations served by the subtransmission line. In 2006 2008, the total peak demand of the substations served by the Valley-Elsinore-Ivyglen 115 kV line was 186 191 MVA, but demand decreased in 2009. For the year 2009 By 2012, the forecasted normal-peak demand on the line is 202 191 MVA, which would exceed normal capacity. Peak demand is projected to increase to 196 MVA in 2013., and the forecasted emergency peak demand is 293 MVA. Table A.1-2, Electrical Needs Area Line Capacity and Peak Demand illustrates the existing capacity limits and forecasted peak line flow for both normal and emergency conditions.

Table A.1-2 Electrical Needs Area – Line Capacity and Peak Demand (Valley-Elsinore-lvyglen 115-kV Line)

	2008	2009	2010
Normal Capacity (MVA)	184	184	184
Projected Peak Demand (MVA)	<u>191</u>	<u>189</u>	<u>169</u>
	2011	<u>2012</u>	<u>2013</u>
Normal Capacity (MVA)	184	<u>184</u>	<u>184</u>
Projected Peak Demand (MVA)	<u>180</u>	<u>191</u>	<u>196</u>

Source: SCE 2010

The Applicant's system power flow studies that model projected electrical demands indicate that in 2009 or 2010 2012 (Table A.1-2), the existing Valley-Elsinore-Ivyglen 115 kV Subtransmission Line will exceed its designed operating limits under normal and abnormal operating conditions. As a result, electric system upgrades are required to reliably serve projected electrical demand within the Electrical Needs Area. A second 115 kV subtransmission line to the Ivyglen 115/12 kV Substation is also needed in order to be consistent with the Applicant's reliability criteria. Although the Valley South System is a network of many lines, the Ivyglen Substation is currently served by a single line, the Valley-Elsinore-Ivyglen 115 kV Subtransmission Line, which is not consistent with the Applicant's reliability criteria. The new 115 kV subtransmission line is necessary to ensure that subtransmission line capacity is available to deliver power safely and reliably to serve the electrical demand during both normal and abnormal conditions. Therefore, to serve projected demand in excess of existing service capacity and increase reliability in the Valley-Ivyglen Electrical Needs Area, the Applicant is proposing to construct a new 115 kV subtransmission line from the Valley 500/115 kV Substation to the Ivyglen 115/12 kV Substation. The new 115 kV subtransmission line is needed to ensure that the Valley South System has sufficient capacity to maintain safe and reliable service to customers in the Valley-Ivyglen Electrical Needs Area.

[•] Page A-14:

4.3 Chapter B: Description of Proposed Project

• Page B-1:

The Project would primarily consist of the construction, operation, and maintenance of a new 25 mile 115 kV subtransmission line to connect the existing Valley and Ivyglen Substations and the construction of the new Fogarty Substation. to provide supplementary electrical services to the City of Lake Elsinore area. The Project would allow the Applicant to reliably serve electrical demand in southwestern Riverside County.

• Page B-2:

Telecommunications System

- Installation of approximately 25 miles of fiber optic cable to provide data communication between the Valley and Ivyglen Substations.
- Integration of the telecommunications line on the proposed subtransmission line poles, with the exception of approximately 600 feet of telecommunication line that would be installed underground
- Telecommunications equipment improvements at the Valley and Ivyglen Substations
- Installation of two fiber optic cable segments between the Fogarty Substation and the existing fiber optic cable between the Elsinore and Ivyglen Substations.
- Telecommunications Lines
- Installation of a new telecommunications line connecting Valley and Ivyglen Substations would follow the same route as the proposed subtransmission line. except for underground entrances into the Valley and Ivyglen Substations.
- Installation of an optical fiber cable would be attached to new poles along the proposed subtransmission line route.
- Installation of one telecommunications line segment exiting the Valley Substation for approximately 300 feet from the substation fence to a riser pole (Segment E-1)
- Installation of one <u>underground</u> telecommunications line segment approximately 300 feet along Temescal Canyon Road into the Ivyglen Substation (Segment W-10).
- Installation of two fiber optic cable segments between the Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen Substations.
- Installation of approximately <u>1,200</u> <u>2,400</u> feet of underground fiber optic cable <u>from the Fogarty</u> <u>Substation to the Ivyglen and Elsinore Substations.</u>
- Installation of all new fiber optic cable in new underground conduits.
- Telecommunications System Improvements
- Installation of two 24-strand fiber optic cable segments between the Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen Substations.
- Installation of new telecommunications equipment

- Installation of an equipment rack in the Fogarty Substation Mechanical-Electrical Equipment Room (MEER) would hold telecommunications equipment for the substation.
- Page B-26:

A telecommunication system is required for communication and monitoring of the proposed subtransmission line, Fogarty Substation, and Valley and Ivyglen Substation improvements. The telecommunications system primarily consists of a fiber optic cable which allows communication for sensor relays that can operate the circuit when an abnormal condition exists on the subtransmission line. The telecommunications system also allows remote-control operation and monitoring of substation equipment. Improvements to the telecommunication system for the Project include the following:

- Installation of approximately 25 miles of fiber optic cable to provide data communication between Valley and Ivyglen Substations
- Integration of the telecommunications line on the proposed subtransmission line poles, with the exception of approximately 600 2.700 feet of telecommunication line that would be installed underground
- Telecommunications equipment improvements at Valley and Ivyglen Substations
- Installation of two fiber optic cable segments between Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen Substations
- Page B-26:

A new telecommunications line connecting Valley and Ivyglen Substations would follow the same route as the proposed subtransmission line except for underground entrances into Valley and Ivyglen Substations. Optical fiber cable would be attached to new poles along the proposed route and would typically be located 26 feet above ground level. The telecommunications line <u>to the Ivyglen</u> <u>Substation</u> would pass underground at <u>the following</u> locations:

- One telecommunications line segment exiting Valley Substation for approximately 300 feet from the substation fence to a riser pole (Segment E-1)
- One telecommunications line segment approximately 300 feet along Temescal Canyon Road into Ivyglen Substation (Segment W-10)

These two segments would comprise approximately 600 feet of underground fiber optic cable and would be installed in new underground conduits. The telecommunications line to Valley Substation would loop-in from the new subtransmission line poles to existing overhead structures on route into the substation.

As part of the Fogarty Substation construction, two fiber optic cable segments would be installed between Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen Substations. The proposed telecommunication line connections would result in one communication path between Fogarty and Elsinore Substations and a second communication path between Fogarty and Ivyglen Substations (which would provide backup in the event of service disruption—e.g. fallen pole). The fiber optic cable installation from the Fogarty Substation would pass underground to two separate existing wood riser poles (one located to the east and one to the west), with each of the two fiber optic cable connections approximately 1,200 feet long. A total of approximately 2,400 feet of

the fiber optic cable required for Fogarty Substation would be installed underground using new underground conduits.

• Page B-35:

This section describes construction methods to be used for this Project. Design, engineering and construction of the Project would take approximately 12-18 24 months with all four components of the Project potentially initiating and terminating at various times within this the 12-18 month timeframe. Approximately 94 construction workers would be required for construction of all four components of the Project. This total represents the maximum number of construction workers over the 12-18 24-month timeframe. However, at no point during construction of the Project would all 94 workers be working at the same time due to the sequential nature of construction and specialized labor.

• Page B-36:

Wire pulling includes all activities associated with installing conductors onto the LDS poles and TSPs. These activities include installing three 115 kV 954 SAC conductors and one 4/0 ACSR <u>336</u> ground conductor.

• Page B-39:

Three <u>One</u> underground locations are is anticipated along the new telecommunication path between Valley and <u>into the</u> Ivyglen Substations. The proposed underground segments of the telecommunications line requiring new construction are <u>is</u> summarized below.

- Approximately 300 feet exiting Valley Substation from the substation fence to a riser pole (Segment E-1)
- Approximately 300 feet along Temescal Canyon Road into Ivyglen Substation (Segment W-10)
- One telecommunication line segment approximately a half mile west of Valley Substation (Segment E-1)
- Page B-40:

The proposed underground segments of the telecommunications line requiring new construction for the Fogarty Substation connections are summarized below.

- Approximately 600 <u>1,200</u> feet along Kings Highway (proposed future road) into the east side of Fogarty Substation from the north
- Approximately 600 <u>1,200</u> feet along Kings Highway (proposed future road) into the east side of Fogarty Substation from the south
- Pages B-40 to B-41:

Prior to final design, a geotechnical investigation would be conducted to ascertain soil type and resistivity (electrical conductivity). Soil excavation would be necessary to install foundations, trenches, and the perimeter wall. The actual quantity of fill to be imported to the site would be ealculated as part of the final engineering and design. Using the "cut and fill" method, it is estimated that 7,450 cubic yards of dirt would be excavated, and 8,250 cubic yards would be required to fill.

It is estimated that up to 50,000 cubic yards of <u>This amount of</u> imported fill would be required if the site is graded to a two percent slope. <u>Out of the 8,250 cubic yards of fill, it is estimated that 800 cubic yards would be required for grading</u>. Following final site grading, a four-inch thick layer of untreated crushed rock would be placed within the walled area of the substation site, except in designated driveways. The Applicant has yet to determine the origin of the fill material and the capacity of the trucks that would be used to transport the fill to the site. For the purpose of this EIR, it is assumed that the transportation of the <u>50,000</u> <u>8,250</u> cubic yards of fill material will require approximately <u>2,500</u> <u>413</u> separate trucks (<u>50,000</u> <u>8,250</u> cy \div 20 cy for each truck = <u>2,500</u> <u>413</u> total trucks).

4.4 Chapter C: Alternatives

• Page C-12:

Central Region Route Segment (Warm Springs-Pacific Clay Alternative): Construct a new 115 kV subtransmission line along existing infrastructure on segments C-8A, C-8B, C-8E, and C-9A, C-9B, C-9C, and C-9E. Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on existing distribution lines (route segment C-8C and portions of C-8C and C-9D). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on new infrastructure (portions of C-8C and C-9D). The westernmost portion of the existing Valley-Elsinore-Ivyglen 115 kV line segment, W-1A, would be relocated north-eastward to accommodate the new Valley-Ivyglen 115 kV line (route segment W-14A and W-14B, <u>W-3A</u>, and W-3B) within a separately proposed Castle and Cooke trail system and utility corridor.

• Page C-27:

Eastern Region Route Segment Alternative (Alternative 6)

Segment E-2, the Eastern Region Route Segment Alternative, starts at the Valley Substation and <u>would</u> ends at the same point on SR-74 <u>as segment E-1 (the Project)</u>. The alternative <u>Segment E-2</u> is approximately <u>1.5</u> <u>1.8</u> miles longer than segment E-1. and would generate similar levels of impact across most of the resource areas. The alternative would have more significant and unavoidable impacts to visual resources and land use than the Project as the route travels along SR-74 for a longer distance. This alternative is therefore eliminated from further consideration.

• Page C-27:

Central Region Route Segment Alternative (Alternative 3)

There are a total of seven segments in the Central Region that do not provide seven complete alternative paths. The alternative would consist of C-2, C-4, and C-6. Segment C-7 has would have significant and unavoidable impacts to <u>on</u> visual resources as it would still travel along portions of Highways SR-74 and I-15, which are Eligible State Scenic Highways, and is therefore eliminated from further consideration. However, the alternative would not travel as close to SR-74 as the Project route. It would also travel through less densely populated residential areas, resulting in fewer impacts to visual resources and land use than the Project. The other environmental impacts associated with this alternative would be comparable to the Project's. This alternative will therefore be included in this EIR for further consideration.

• Page C-28:

Western Region Route Segment Alternatives A and B

There are a total of eight segments in the Western Region that do not provide eight complete alternative paths. Segments W-7, W-9, and W-12 are eliminated due to construction difficulties, which eliminated segments W-6 and W-11 from further consideration. The use of segments W-2, and W-3, in combination with W-4, W-8, and W-10 would require replacing the existing crossing of I-15. This would result in removal of the Valley-Elsinore-Ivyglen 115 kV subtransmission line from service, and consequently, the grouping of these segments for an alternative would not meet Project objectives. The use of combination of segments W-1, and W-4, and W-4, Group W-5 for an alternative would generate significant land use conflicts. These alternatives The Western Region Route Segment Alternatives A and B are, therefore, eliminated from further consideration.

- Page C-30:
 - Alternative 4 (Fogarty Substation Site Alternative <u>A</u>-1): Construct a 115/12 kV substation on a 5.7-acre parcel of land directly west of Terra Cotta Road, south of future Kings Highway, and north of future Hoff Avenue (Figure A.1-2).
 - Alternative 5 (Warm Springs-Pacific Clay Alternative): Construct a new 115 kV subtransmission line along existing infrastructure on segments C-8A, C-8B, C-8E and C-9A, C-9B, C-9C, and C-9E (Figure C.2-6). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on existing distribution lines (segment C-8D and portions of C-8C and C-9D). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on new infrastructure (C-8C and C-9D). The westernmost portion of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on new infrastructure (C-8C and C-9D). The westernmost portion of the existing Valley-Elsinore-Ivyglen 115 kV line segment, W-1A, would be relocated northeastward to accommodate the new Valley-Ivyglen 115 kV line, W-4, using line segments W-14A, and W-14B, W-3A, and W-3B as well as W-13A, W-13B, W-13C, and W-13D (Figures C.2-7 and C.2-8). Minor changes to the telecommunications line routes described in Section B.3.2.1 would be made.
 - <u>Alternative 6 (Eastern Region Route Segment Alternative)</u>: Construct a new 115 kV subtransmission line as described under Alternative 5 but use alternative route segment E-2 instead of E-1 (Figures C.2-3, C.2-4, and C.2-5).

These alternatives and their environmental impacts compared to those from the Project are individually discussed in Chapter E, Comparison of Alternatives. <u>Figure C.2-2 (Section 4.11, Revised Figures, of the Final EIR) indicates which alternative route segments were carried forward for analysis in Chapter E.</u>

4.5 Chapter D: Environmental Analysis

4.5.1 Section D.1: Introduction to Environmental Analysis

• Page D.1-2:

Ecology and Environment, Inc. (E & E) conducted a third-party review of all technical information submitted to the County CPUC by the Applicant for this Draft \rightarrow EIR.

4.5.2 Section D.2: Land Use

• Page D.2-19:

For the purpose of this evaluation, the Project would have a significant impact on public health and safety <u>land use</u> if it would:

• Page D.2-20:

The Project would be visible from SR-74 and I-15 and would therefore conflict with one policy in the Land Use Element of the Riverside County General Plan (LU 13.5).

• LU 13.5- Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground. (AI 3, 32)

The Project would conflict with LU 13.5 resulting in a significant land use impact. This significant impact <u>could would</u> be mitigated to a less than significant level by placing the proposed subtransmission line underground, as stated in LU 13.5. <u>In addition, the City of Lake Elsinore zoning code stipulates in Section 17.04.040.D.1</u> "where practical, all utilities, including the linkage between <u>main line and structures, shall be underground.</u>" However, the Applicant has stated that it is unfeasible to place the subtransmission line underground because the higher costs make it prohibitive. The cost of underground subtransmission line is six to ten times greater than a similar overhead configuration. Therefore, Impact 4.2-2 would be significant and unavoidable (Class I).

4.5.3 Section D.3: Visual Resources

• Page D.3-38:

Construction activities would also pose visual impacts. Construction of the proposed subtransmission line would generally be conducted during daylight hours and last approximately $\frac{12 \text{ to } 18}{24}$ months.

• Page D.3-39:

The Applicant does <u>not</u> intend to install the Subtransmission Line wholly underground, and the APMs fall short of meeting regional regulations protecting scenic resources within view of an Eligible State Scenic Highway. This impact is significant and unavoidable (Class I).

• Page D.3-43:

The segment of the proposed route along SR-74 would <u>block obstruct</u> views of scenic resources and with the introduction of TSPs and LDS poles as opposed to wood poles, increase contrast with natural settings while substantially diminishing visual character (see below for a discussion of protected views from a state scenic highway).

4.5.4 Section D.4: Biological Resources

A number of changes were made to the Biological Resources section in response to comments on the Draft EIR. In the Final EIR, the revised section is provided in Chapter 5, Revised Biological Resources Section.

4.5.5 Section D.5: Cultural Resources

• Page D.5-14:

The telecommunication system is to be strung on the same poles as the transmission line so the impact of this installment is the same as for the rest of the line. However, because subsurface installation of approximately 600 approximately 2,700 feet of telecommunication line could potentially disturb unknown buried historic resources, implementation of MM CUL-1b and CUL-1c will reduce any adverse change in the significance of a historic resource to less than significant levels (Class II).

• Page D.5-16:

MM CUL-1b (Cultural Resources Treatment Plan): There are resources within the Project area whose eligibility for the CRHR is undetermined due to lack of evidence. These resources may be found to be considered significant archaeological or cultural resources pending further investigation. If avoidance of these resources is not feasible, each site identified in the sections above as having an undetermined eligibility status must be tested and evaluated by an archaeologist with the qualifications defined in MM CUL-1c. Testing and evaluation may consist of surface collection and mapping, limited subsurface excavations, and the appropriate analyses and research necessary to characterize the artifacts and deposit from which they originated, archival research, and photo documentation. Upon completion of the test level investigations for sites determined to be unique archaeological sites or historical resources as set forth in CEQA Guidelines Section 15064.5, the archaeologist shall prepare recommendations for submission submit its recommendations to the CPUC in a "Cultural Resources Treatment Plan" (CRTP) on the measures that shall be implemented to protect or mitigate the impact to the sites. Prior to submission to the CPUC, the Applicant will consult with Native American groups on appropriate mitigation and treatment of recovered artifacts. The Native American Heritage Commission can mediate negotiations at the Applicant's discretion under California Public Resources Code 5097.94(k) or (l). All test- and data-recovery level excavations shall be monitored by representatives of interested Native American Tribes. The Pechanga and Soboba Bands of Luiseño Indians have expressed a desire to be present during excavations.

• Page D.5-17:

MM CUL-1d (Human Remains): In the event of the accidental discovery or recognition of human remains during Project construction, the following steps shall be taken: There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Riverside County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the coroner determines the remains to be Native American, then the coroner shall contact the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the MLD from the deceased. The MLD may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in PRC Section 5097.98. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage County coroner determines to the remains to the remains and associated grave goods as provided in PRC Section 5097.98.

reasonable timeframe. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.

• Page D.5-18

The potential for the installation of the telecommunications system to cause an adverse change in the significance of the resources discussed in the Valley-Ivyglen Subtransmission Line, discussed above, can be reduced with careful project design and component placement. Subsurface installation of approximately <u>600 approximately 2,700</u> feet of telecommunication line could potentially disturb an unknown buried archaeological resource; however, implementation of MM CUL-1b and MM CUL-1d will reduce any adverse change in the significance of a historic resource to less than significant levels (Class II).

4.5.6 Section D.6: Geology, Soils, and Mineral Resources

• Page D.6-20:

The telecommunications system would traverse pass near the documented Alquist-Priolo Hazard Zone for the Ivyglen Fault on overhead lines immediately before entering the underground portion leading to the Ivyglen Substation.

• Page D.6-20:

Implementation of Applicant Proposed Measure GEO-SCE-2 and MMs GEO-1b, GEO-1c, and GEO-1d would reduce impacts to the proposed subtransmission line due to ground shaking to less than significant levels (Class II).

• Page D.6-21:

MM GEO-1a: All construction personnel shall adhere to the Applicant's worker safety guidelines and policies to avoid additional adverse effects to health and safety in the event of an earthquake during construction. A site-specific safety plan with Prior to construction, all construction personnel shall participate in a worker awareness program that highlights seismic activity highlighted as a potential hazard during all onsite construction activity shall be submitted to the California Public Utilities Commission (CPUC) for review and approval at least 60 days before construction.

• Page D.6-21:

MM GEO-1c: For overhead transmission lines, site specific geotechnical investigations will be performed at proposed pole locations to evaluate the potential for fault surface rupture. Where significant potential for fault surface rupture exists, pole locations will be adjusted as possible. Incorporation of standard engineering practices in accordance with the UBC, CBC, and Alquist-Priolo Act as part of the Project will ensure that people or structures are not exposed to fault rupture hazards such as strong seismic ground shaking, seismic related ground failure such as liquefaction, and landslides.

• Page D.6-21:

MM GEO-1d: Project design and construction shall be in conformance with current best standards for earthquake resistant construction in accordance with the CBC (Seismic Zone 4). In addition, project design shall follow the recommendations of the site specific geotechnical investigation report in MM GEO-1b and Applicant Proposed Measure SCE-GEO-2.

• Page D.6-22:

MM GEO-2a: An erosion and sedimentation control plan shall be incorporated into the SWPPP for Project construction activities to minimize onsite soil erosion and offsite sedimentation. The plan shall include site maps, identification of construction activities, and measures for providing erosion and sediment control. The erosion and sedimentation control plan as part of the SWPPP shall be submitted to the CPUC for review and approval at least 60 days before construction. Compliance with this measure shall be documented to the CPUC at least 60 days before construction.

• Pages D.6-23 to D.6-24:

MM GEO-3a: The Applicant shall perform design-level geotechnical investigations to assess the potential for geological hazards to include liquefaction, unstable slopes, landslides, earth flows, debris flows, and expansive soils to affect the approved Project structures. Where hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the final Project design, such as. Appropriate measures could include:

- Ground improvement of liquefiable zones
- Incorporation of slack in underground portions of the telecommunications system
- Positioning of Project structures away from steep hillsides and steep drainages
- Excavation of potentially expansive soils during construction and replacement with tested and engineered backfill
- Redirection of surface water and draining away from expansive foundation soils

The Applicant shall submit a report of the geotechnical survey and proposed measures to reduce the potential impacts of geological hazards to the CPUC for review and approval at least 60 days before construction. Compliance with this measure shall be documented to the CPUC at least 60 days prior to construction.

4.5.7 Section D.7: Hydrology and Water Quality

• Page D.7-10:

The Ivyglen Substation is located on Temescal Wash, with the nearest water body being Corona Lake. <u>The Ivyglen Substation is not located in a flood hazard zone</u>. The Valley Substation is located in a 100-year flood zone as well as a dam failure inundation area. Flood hazards would not affect the Ivyglen Substation.

• Page D.7-15:

Construction of the Project will include the creation of new impervious surfaces that would influence groundwater absorption rates and deplete groundwater supplies. In addition, any groundwater used during construction could deplete the availability of groundwater, but also increase the amount of wastewater surface water and potentially overwhelm the ability of the ground to absorb the water through existing drainage systems.

• Page D.7-16:

Applicant Proposed Measures HYDRO-SCE-1, 2, 3, and 4 would further reduce impacts from erosion to a less than significant level (Class III).

• Page D.7-18:

Operation and maintenance of the Project after implementation of the Applicant Proposed Measures HYDRO-SCE-1, 2, 3, 4, BMPs, and regulatory requirements would have a less than significant impact (Class III) on drainage patterns and erosion or siltation.

4.5.8 Section D.8: Hazards and Public Safety

• Page D.8-1:

The Valley-Ivyglen Subtransmission Line and telecommunications system are located within a 25-mile-long, 4,000 foot wide corridor that traverses the City of Perris, the City of Lake Elsinore, and the Glen Ivy/Corona Lake Area, all within Riverside County.

• Page D.8-17:

MM HAZ-2a: As part of the siting and engineering process for the proposed subtransmission line, the Applicant shall precisely locate all underground natural gas lines in the area. Prior to finalizing the engineering design, the Applicant shall contact the Underground Service Alert of Southern California (DigAlert 2006) to identify the exact locations of gas pipelines within the project area. In addition, the Applicant shall contact affected private landowners to determine if septic systems and associated leach fields as well as other underground facilities may be impacted by construction of the Project. Final engineering plans for the Project shall be designed to avoid or minimize interference or damage to underground facilities, both public and private. The Applicant shall immediately notify by telephone the owner of underground facilities that may have been damaged or dislocated during construction of the Project.

• Page D.8-18:

Impact HAZ-6: Public or Worker Safety Hazard Due to Proximity to Private Airstrip

The proposed subtransmission line route is approximately 1.1 miles from the Perris Valley Airport, a private airport used exclusively for recreation. Neither Valley Substation, Ivyglen Substation, nor the proposed Fogarty Substation are within the vicinity of a private airstrip. Impacts to both airports and workers are discussed above and determined to be less than significant (Class III).

During public scoping, Ken Niemi (a private citizen) raised concerns on behalf of the Elsinore Hang Gliding Associate Association that the proposed subtransmission line would present a public safety

hazard to recreational hang gliders. The proposed subtransmission line route runs alongside the Corona Freeway. The hang glider activity is primarily centered on the Elsinore Mountains southeast southwest of Lake Elsinore in the Cleveland National Forest. Due to a natural phenomenon called the Elsinore Convergence, the Elsinore Mountains are a popular launch point for cross-country or long-distance hang gliders. Mr. Niemi identified vacant fields alongside I-15 in segment C6 of Figure B.3-<u>5</u> B.4-5 where the proposed line crosses I-15 at Nichols Road as an area of high public safety concern. Mr. Niemi indicated that hang gliders frequently use fields along highways for landings for accessibility reasons and cited <u>the</u> visibility of lines as an issue. Visibility markers such as orange balls on the lines in segment C6 would reduce the risk of hang glider entanglement with power lines and MM HAZ 6a is recommended. With the implementation of MM HAZ 6a, this impact would be less than significant (Class II).

Hang gliders currently land on a vacant stretch of beach near the Lake Elsinore West Marina with the owner's permission (Burgin 2008). The landing area is located approximately 3 miles south of the intersection with I-15 and 2.5 miles south of the proposed subtransmission line at the nearest point. Given the distance between the subtransmission line and landing zone, impacts were determined to be less than significant under this criterion and no mitigation is required (Class III).

Mitigation Measures for Impact HAZ-6

MM HAZ-6a: The Applicant shall use visibility markers on all portions of the proposed subtransmission line within half a mile in either direction of I-15 where the line crosses I-15 near Nichols Road.

• Page D.8-21:

In undeveloped and natural areas, measurable <u>power-frequency</u> EMFs are not present except in the vicinity of existing power line corridors.

• Page D.8-21:

However, the most significant contributors to the EMFs <u>outside of substation fence lines</u> are the subtransmission and distribution lines. Therefore, the subtransmission line magnetic fields described above would also apply in the immediate area of substations.

• Page D.8-28:

In 1991, the CPUC initiated an investigation into electric and magnetic fields associated with electric power facilities. This investigation explored the approach to potential <u>MMs mitigation</u> for reducing public health impacts and possible development of policies, procedures, or regulations. Following input from interested parties, the CPUC implemented a decision (D.93-11-013) that requires that utilities use "low-cost or no-cost" <u>MMs mitigation</u> for facilities requiring certification under General Order 131-D. The decision directed the utilities to use a 4% benchmark on the low-cost mitigation. This decision also implemented a number of EMF measurement, research, and education programs, and provided the direction that led to the preparation of the DHS study described above. The CPUC did not adopt any specific numerical limits or regulations on EMF levels related to electric power facilities.

4.5.9 Section D.9: Recreation

• Page D.9-5:

Although the project area is experience rapid residential and commercial growth that would place an increased demand on existing park facilities, the Project would not contribute to cumulative impacts on parks and other recreational facilities. As discussed above, the Project would <u>not</u> contribute to population growth in the area. In addition, it would not cross existing or planned park facilities. Therefore, the Project would not contribute to cumulative recreational impacts in the area.

4.5.10 Section D.10: Air Quality

• Page D.10-11:

Project construction is segmented into the following four areas:

- 1. New 25-mile Ivyglen 115-kV Subtransmission Line construction;
- 2. New Fogarty Substation construction;
- 3. <u>Telecommunications</u> improvements to the existing Valley and Ivyglen Substations; and
- 4. Decommissioning and demolition of Dryden Substation.
- Page D.10-11:

It is also anticipated that small quantities of SF_6 could would leak from transformers circuit breakers installed as part of the Project.

• Page D.10-19:

Five new <u>220115</u>-kV circuit breakers would be located at the Fogarty Substation.

• Page D.10-19:

About two-thirds of the CO_2e emissions would be attributable to SF_6 used in circuit breakers-and/or transformers.

4.5.11 Section D.11: Noise and Vibration

• Page D.11-9:

Construction of the Fogarty Substation would take place over a $\frac{12}{14}$ -month period overlapping with the $\frac{18}{24}$ -month subtransmission line/telecommunications system construction period.

• Page D.11-11:

Although the noise levels from Project construction would constitute a nuisance during the 18 month construction period, they would not result in significant impacts after the implementation of MM NOISE-1a (Class III).

• Page D.11-13:

Impact NOISE-2: Excessive Ground-Bourne Groundborne Vibrations or Ground-Bourne Groundborne Noise Levels

4.5.12 Section D.12: Transportation and Traffic

• Page D.12-7:

The California Department of Transportation (Caltrans) is responsible for the oversight of state highways within California. Caltrans requires that all work done within a state highway ROW receive an encroachment permit from Caltrans. Encroachment permits must also be obtained for transmission lines that span or cross any state roadways. Encroachment permits are described in Chapter 600 of the Caltrans Encroachment Permit Manual (Caltrans 2009a); Chapter 13 of the Caltrans Right of Way Manual (Caltrans 2009b); and Chapter 17 of the Caltrans Project Development Procedures Manual (Caltrans 1999).

• Page D.12-10:

The Applicant estimates that during the <u>18 24-</u>month construction period the daily workforce would be comprised of 56 workers on a peak day of construction (i.e., if all aspects of the Project were being constructed simultaneously).

4.5.13 Section D.13: Public Services and Utilities

• Page D.13-2:

The Applicant and the Southern California Gas Company (SCG) provide electrical services and natural gas services respectively to Riverside County and the Cities of Lake Elsinore and Perris as shown in Table D.13-1. The Project would expand the Applicant's existing electrical service. The Project would allow the Applicant to reliably serve electrical demand in southwestern Riverside County.

4.5.14 Section D.14: Agriculture

• Page D.14-8:

There is <u>are</u> currently 180,178 acres of farmland within Riverside County. The County is experiencing rapid urban growth and as a result the number of acres of farmland is shrinking. The Project would only impact 2.72 acres of prime agricultural lands. However, given the rapid loss of agricultural lands in the County due to general urban growth and the County's policy to preserve prime agricultural lands, the <u>The</u> Project is <u>not</u> considered to have a significant contribution to cumulative agricultural impacts in the County.

4.5.15 Section D.15: Population and Housing

• Page D.15-3:

This total represents the maximum number of construction workers over the <u>12-18</u> <u>24-</u>month timeframe. However, at no point during construction of the Project would all 94 workers be working

at the same time due to the sequential nature of construction and specialized labor. The county has enough temporary housing to accommodate the 94 construction workers during the 18 month construction period.

4.5.16 Section D.16: Mandatory Findings of Significance

• Page D.16-1:

No Project impacts identified as less than significant would result in a cumulatively significant impact. No mitigation is required (Class III). As discussed at the end of every environmental analysis sections D.2 through D.15, the following individually significant impacts would contribute to cumulatively significant impacts:

- Visual Resources
- Agricultural Resources
- Land Use
- Air Quality
- Page D.16-2:

The Project would result in significant impacts to the following resource areas:

- Visual Resources
- Agricultural Resources
- Land Use
- Air Quality

4.6 Chapter E: Comparison of Alternatives

• Page E-1:

The following alternatives have been considered and are discussed in the following sections:

- Alternative 1: No Project
- Alternative 2 (Middle Corridor Alternative): Construct a new 115 kV subtransmission line that traverses between the Valley 500/115 kV and Ivyglen 115/12 kV Substations. The line would pass along the existing Valley-Serrano 500 kV right-of-way (ROW) to an area north of the Ivyglen Substation and eventually connect to the Ivyglen Substation by one of various routes (Figure C.2-1, Middle Corridor).
- Alternative 3 (Central Region Route Segment Alternative): Construct a new 115 kV subtransmission line along segments C-2, C-4, and C-6 (Figure E-1).
- Alternative 4 (Fogarty Substation Site Alternative A): Construct a 115/12 kV substation on a 5.7-acre parcel of land directly west of Terra Cotta Road, south of future Kings Highway, and north of future Hoff Avenue (Figure A.1-2).
- Alternative 5 (Warm Springs-Pacific Clay Alternative): Construct a new 115 kV subtransmission line along existing infrastructure on segments C-8A, C-8B, C-8E and C-9A, C-9B, C-9C, and C-9E (Figure C.2-6). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line

would be relocated southward and placed on existing distribution lines (segment C-8D and portions of C-8C and C-9D). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on new infrastructure (C-8C and C-9D). The westernmost portion of the existing Valley-Elsinore-Ivyglen 115 kV line segment, W-1A, would be relocated northeastward to accommodate the new Valley-Ivyglen 115 kV line, W-4, using line segments W-14A, and W-14B, W-3A, and W-3B as well as W-13A, W-13B, W-13C, and W-13D (Figures C.2-7 and C.2-8 Figure E-1). Minor changes to the telecommunications line routes described in Section B.3.2.1 would be made.

• <u>Alternative 6 (Eastern Region Route Segment Alternative)</u>: Construct a new 115 kV subtransmission line as described under Alternative 5 but use alternative route segment E-2 instead of E-1 (Figure E-1).

Figure E-1 shows the Project and Alternatives 3 and 5 in their entirety. Alternative 5 is the Environmentally Superior Alternative and is identified on this figure. Figure E-1 also shows Alternative 6.

• Page E-4

						Alt. 6:
			Alt. 3: Construct		Alt. 5: Construct	Construct the
		Alt. 2: Construct	the central	Alt. 4:	the	subtransmission
		the	portion of the	Construct the	subtransmission	line along
		subtransmission	subtransmission	Fogarty	line along	segments E-2,
		line along the	line along	Substation	segments C-8,	<u>C-8,C-9, W-3, W-</u>
Environmental	Alt. 1:	Valley-Serrano	segments C-2,	west of Terra	C-9, W-3, W-13,	<u>13, and</u>
Issue Area	No Project	500 kV ROW	C-4, and C-6	Cotta Rd	and W-14	<u>W-14</u>
Air Quality	-1a	0	0	0	0	<u>+1</u>
Land Use	-1a	+1 <u>-1b</u>	-1b	0	0	<u>+1</u>
Mineral Resource	-1a	-1a	0	0	-1a	<u>-1a</u>
Visual Resources	-1a	0 -1b	-1b	+1	0	+1

Table E.2-1 Comparison of Alternatives Selected for Consideration to the Proposed Project

Notes:

a Impacts reduced from significant and unavoidable (Class I) to less than significant (Class II).

b Impacts reduced compared with the Project but remain significant and unavoidable (Class I).

Alternatives eliminated from further consideration are not included.

Key:

-1 = Impact considered less when compared with the Project.

0 = Impact considered equal to the Project.

+1 = Impact considered greater when compared with the Project.

Alternative 5 consists of two geographically separated portions of the subtransmission route—the Warm Springs and Pacific Clay portions. The Warm Springs portion of Alternative 5 would connect segments C-1 in the Central Region to segment W-1A in the Western Region. This comprises segments C-8A, C-8B, C-8C, C8-D, C-8E and C-9A, C-9B, C-9C, C9-D, C-9E (Figure C.2-6). The Pacific Clay portion of Alternative 5 would connect W-1A to W-4 in the Western Region and comprises segments W-13A, W-13B, W-13C, W-13D, W-14A, W-14B, <u>W-3A</u>, and W-3B (Figure C.2-7). Combined, these segments make up a complete route between the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations and still maintain a route that would serve the Valley-Ivyglen and Fogarty Electrical Needs Areas. Alternative 5 would cross over or extend along Highway I-15 and SR-74,

[•] Page E-10:

both of which are Eligible Scenic Highways, although they are not officially designated at this time. Class I Land Use and Visual impacts would remain with Alternative 5, however Class I impacts to mineral resources would be avoided.

• Page E-10:

Combined, these segments make up a complete route between the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations and still maintain a route that would serve the Valley-Ivyglen and Fogarty Electrical Needs Areas. <u>Minor changes to the telecommunications line routes described in Section B.3.2.1 would be made.</u>

• Page E-11:

Alternative 5 would not result in the loss of availability of a known mineral resource that would be of value to the region. Specifically, the clay production from the Pacific Clay mining facility would not be impacted by Alternative ± 5 . The region's mineral resource recovery sites would not be affected. As a result, impacts to mineral resources would be less than from the Project.

• Page E-12:

Biological Resources: Warm Springs Portion of Alternative 5 (Segments C-8 and C-9)

Summary

The biological analysis has been separated due the habitat differences between the Warm Springs and Pacific Clay portions of Alternative 5.

For both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses (C-3, C-4, and C-6), impacts to biological resources would be less than significant with implementation of mitigation measures (D.4.3.2<u>3</u>). Based on the impact classifications described under the Significant Criteria Section (D.4.3.1), development of Alternative Route 5 would involve Class III (less than significant without mitigation measures) and potentially Class II (less than significant after mitigation measures are implemented) impacts.

• Page E-12 to E-14:

Burrowing Owls

Impacts to burrowing owls for both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses would be less than significant. No burrowing owls, burrows, or sign (i.e. scat, feathers, burrows) were detected during general habitat assessment surveys along the Alternative 5 route or the portion of the Project route that this alternative bypasses (AMEC 2007). Pre-construction surveys would be conducted to detect any burrowing owls that may have translocated into previously unoccupied areas. MM BIO-1be requires that pre-construction surveys be conducted for burrowing-owls using the existing CDFG protocols. If breeding burrowing owls are found during the pre-construction surveys, the burrows would be flagged and an appropriate construction buffers, as determined by a qualified wildlife biologist outlined in MM BIO-1f, would be established to avoid direct and indirect impacts to active nests. If the appropriate buffer cannot be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, the Applicant's biologist to determine relocation protocols and additional mitigation requirements. then, as a PSE, the Applicant will follow procedures in MSHCP policy 6.3.2, and as outlined in the Applicant prepared DBESP (MM BIO-1f). For lands not under the

MSHCP, if the appropriate buffers cannot be maintained and impacts on the burrowing owl and/or their habitat (i.e., occupied burrows) are unavoidable, the Applicant will develop and implement a Burrowing Owl Compensation Plan, as approved by the CDFG.

Rare and Narrow Endemic Plants

Impacts to rare and narrow endemic plants for both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses would be less than significant with preconstruction surveys and mitigation. During surveys conducted by AMEC in 2006 and 2007, no rare or narrow endemic plants were detected along these portions of the route (AMEC 2008 and 2006). However, 2009 surveys conducted by the Applicant along C-9 route segments found a large smooth tarplant population to the northeast of the ROW (Figure D.4-6). The California Natural Diversity Database has mapped historic occurrences of San Jacinto Valley crownscale and Coulter's goldfields within the buffer of segment C-8B along Temescal wash and an occurrence of San Diego ambrosia along the northwest portion of Project route C-6 (record dates not provided; AMEC 2008). These three plant species are considered by the California Native Plant Society to be "Rare, Threatened, or Endangered in California and Elsewhere". No rare or narrow endemic plant surveys were conducted along C-9 route segments. These areas consist of disturbed or developed habitat and are outside of MSHCP criteria and narrow endemic plant survey areas; therefore, rare and endemic plants are unlikely to occur along these segments (AMEC 2008).

The Warm Springs portion of Alternative 5 is partially within MSHCP criteria area 1 and a narrow endemic plant survey area. It contains several MSHCP-mapped sensitive soils including willows silty clay, altamont cobbly clay, traver fine sandy loam, traver fine sand, and altamont clay (AMEC 2008). Portions of the Project route (C-3, C-4, and C-6) does not cross any mapped sensitive soils (Figure D.4-11). The segments of the Project route that this alternative bypasses are outside of these MSHCP designated areas. Based on the MSHCP-mapped sensitive plant and soils areas, Alternative 5 may occupy more potential habit for rare plants than the Project route. However, the segments along Alternative 5 and the Project route (C-3, 4, and 6) have a low probability of rare plant occurrence because habitat is disturbed and/or dominated by non-native, invasive species. Despite predominantly unsuitable habitat conditions, pre-construction surveys may be are warranted in certain locations such as the portion of C-8B and C-9 where rare plants have previously occurred. The survey reports indicate that rare plant surveys were conducted during low rainfall years and recommend preconstruction surveys to confirm presence or absence in areas where suitable habitat is present (AMEC 2008 and 2006). Figure E.2-1 shows the MSHCP area for the Warm Springs portion of Alternative 5.

If rare or narrow endemic plants are identified during pre-construction surveys, implementation of mitigation measure MM BIO-1a would reduce or avoid impacts. At the pre-construction survey stage, project micrositing and engineering changes would no longer likely be feasible impact avoidance measures; however, the Further, additional avoidance and mitigation following measures as outlined in MM BIO-1a and 1b (see D.4.3.3) would be used to minimize the possibility of inadvertent encroachment or if direct impacts to plants would occur.

- a. Flagging or otherwise marking sensitive plant species will be done by a trained local botanist. Construction crews will avoid direct or indirect impacts to these flagged areas. Construction personnel shall be instructed to avoid intrusion beyond these marked areas.
- b. Monitoring the known locations of special status plant populations that might be found prior to or during the construction period, using a trained professional botanist. Monitoring while construction is taking place in the vicinity of the special status plant populations and for one year following construction to assess the effectiveness of protection measures.

• Page E-14:

Other Special Status Wildlife

Impacts to other special status wildlife species for the Warm Springs portion of Alternative 5 would be less than significant while impacts for the Project route (C-3, 4, and 6) would likely be less than significant with mitigation. No special status wildlife species were found during surveys along the Warm Springs portion of Alternative 5 during surveys conducted by AMEC in 2006 (AMEC 2006). According to the California Natural Diversity Database, there was are historic occurrences of the orange-throated whiptail along the buffer of C-8B and C-9 (record date not provided; AMEC 2006). CNDDB 2010). These areas are highly disturbed and developed; therefore, it is unlikely that orange-throated whiptails now no longer would occur in these this locations. because it is now developed as a shopping center; However, there may be the potential for occurrence in undeveloped areas adjacent to this site these areas. The orange-throated whiptail is a California species of special concern and an MSHCP covered species. The Warm Springs portion of Alternative 5 bypasses a segment of the Project route (C-6) where the California Natural Diversity Database has a record of a Stephen's kangaroo rat occurrence. Stephen's kangaroo rats are state threatened and federally endangered. Kangaroo rat sign was found along C-6 during surveys (record date not provided; AMEC 2006). No CNDDB occurrences of Stephen's kangaroo rat occur within the C-8 and C-9 route areas (CNDDB 2010).

Wetland and Riparian Habitat

Both the Warm Springs portion of Alternative 5 and the Project routes that Alternative 5 bypasses (C-3, C-4, and C-6) would have no significant impact on wetlands or riparian areas with mitigation. Both the Warm Springs portion of Alternative 5 and the Project (C-3, C-4, and C-6) would cross Temescal Wash once. Wash crossing areas could be easily spanned by the transmission line to avoid impacts related to soil disturbance. Impacts along route C-8C may be more significant where the route passes a pond along Baker Street. At this location, the route follows a dirt road that passes through wetlands associated with the pond on Baker Street and connected to Temescal Wash. Direct impacts to these wetlands would likely be unavoidable, but could potentially would be reduced to a level of less than significant with implementation of mitigation measures (BIO-APMS 2, 4, and 7 and MM BIO-2<u>a and -2b</u>).

Biological Resources: Pacific Clay Portion of Alternative 5 (Segments W-3, W-13, and W 14)

Summary

The biological analysis has been separated due the habitat differences between the Warm Springs and Pacific Clay portions of Alternative 5. For both the Pacific Clay portion of Alternative 5 and the segment of the Project route that this alternative bypasses (W-1B), impacts to biological resources would be less than significant with implementation of mitigation measures (D.4.3.23). Based on the impact classifications described under the Significant Criteria Section (D.4.3.1), development of the Pacific Clay portion of Alternative 5 would involve Class III (less than significant impact without mitigation measures) and potentially Class II (less than significant impact after mitigation measures are implemented) impacts.

• Page E-17 to E-18:

Riparian Birds

Impacts to sensitive riparian birds for both the Pacific Clay portion of Alternative 5 and Project route W 1B would likely be less than significant with inclusion of pre-construction nesting surveys, where appropriate and MM BIO-1a, 1g, and 1h (D.4.3.3).

The Pacific Clay portion of Alternative 5 and Project route W-1B follow existing roads that run adjacent to riparian habitat along Temescal Wash. Riparian bird surveys for least bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo were conducted by AMEC where patches of suitable wooded riparian habitat occur along Temescal Wash in 2007 (AMEC 2007a). These surveys found no evidence of these species in the riparian habitat along W-14A and W-13B. A single least bell's vireo and four willow flycatchers were recorded in the riparian habitat near the Pacific Clay portion of Alternative 5 routes W-3B and W-14B and Project route W-1B; however, neither the least bell's vireo nor the willow flycatchers were recorded on subsequent visits, therefore, it is unlikely that nesting occurs in this area (AMEC 2007a). Surveyors determined that the willow flycatchers were not the endangered southwestern subspecies based on the timing of the observations (AMEC 2007a). In this area, the applicant should conduct pre-construction nesting surveys if construction will occur during the nesting season (MM BIO-1e), and avoid work within occupied riparian habitat at all times (MM BIO-1g).

Burrowing Owls

Impacts to burrowing owls for both the Pacific Clay portion of Alternative 5 and Project route W-1B would likely be less than significant with pre-construction surveys and implementation of mitigation measures.

No burrowing owls or sign (i.e. scat, feather, burrows) were detected along the Pacific Clay portion of Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during burrowing owl surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006). Surveys were not conducted along W-14B or along an approximately 1,300-foot segment at the intersection of Lake Street and the southbound I-15 exit ramp (W-14B and portions of W-14A and W-13B). W-14B is outside of the MSHCP-designated burrowing owl survey area (AMEC 2007 Figure 4); however, the un-surveyed segment at the intersection of Temescal Canyon Road and Lake Street may overlap or run adjacent to a burrowing owl survey area that is located south of I-15 and east of Lake Street. The potential for burrowing owl occurrence along these segments is low due to a lack of suitable habitat in wooded riparian areas and the close proximity to significant vehicle traffic from I-15 and Temescal Canyon Road.

Burrowing owls may be impacted by the Pacific Clay portion of Alternative 5 if they nest along these unsurveyed segments. If Alternative 5 is implemented, impacts to burrowing owls would be mitigated to a level of less than significant by conducting pre-construction surveys and implementing the measures described below <u>MM BIO-1f (D.4.3.3)</u>. Pre-construction surveys would also be conducted in previously surveyed areas to detect any burrowing owls that may have translocated into previously unoccupied habitat. MM BIO-1be requires that pre-construction surveys be conducted for burrowing owls using the existing CDFG protocols. If breeding burrowing owls are found during the pre-construction surveys, the burrows would be flagged and an appropriate construction buffer, as determined by a qualified wildlife biologist, would be established to avoid direct and indirect impacts to active nests. If the appropriate buffer cannot be maintained or if non breeding burrowing owls are found during the pre-construction surveys, the CDFG will be contacted by the Applicant's biologist to determine relocation protocols and additional mitigation requirements.

If breeding burrowing owls are found during the pre-construction surveys, the burrows would be flagged and appropriate construction buffers, as outlined in MM BIO-1f, would be established to avoid direct and indirect impacts to active nests. If the appropriate buffer cannot be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, then, as a PSE, the Applicant will follow procedures in MSHCP policy 6.3.2, and as outlined in the Applicant prepared DBESP (MM BIO-1f). For lands not under the MSHCP, if the appropriate buffers cannot be maintained and impacts on the burrowing owl and/or their habitat (i.e., occupied burrows) are unavoidable, the Applicant will develop and implement a Burrowing Owl Compensation Plan, as approved by the CDFG.

Rare and Narrow Endemic Plants

Impacts to rare and endemic plant species for both the Pacific Clay portion of Alternative 5 and Project route W-1B would be less than significant with pre-construction surveys and implementation of mitigation measures.

No rare or narrow endemic plant species were detected along the Pacific Clay portion of Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during rare plant surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006). Suitable habitat for rare plants associated with clay soils occurs along a portion of the Pacific Clay portion of Alternative 5 segment W-14A and along the Project route (W-1<u>AB</u>) (<u>AMEC 2007b and 2006Figure D.4-12</u>). Overall, the Pacific Clay portion of Alternative 5 would result in the disturbance of less clay soil habitat than the Project route W-1B.

Surveys were not conducted along W-14B, a small (approximately 50-foot) portion of W-3B, or along an approximately 1,300-foot segment at the intersection of Lake Street and the southbound I-15 exit ramp (portions of W-14A and W-13B). These areas are within Criteria Area 1 of the MSHCP but are outside of the MSHCP-designated narrow endemic plant species survey area, with the exception of a small portion of the segment along Lake Street where it crosses Temescal Wash (AMEC 2007b and County of Riverside 2003). Surveys should be conducted for Criteria Area 1 species where suitable habitat occurs within these designated areas. These segments have a low probability of rare plant occurrence because habitat is disturbed and dominated by non-native, invasive species; however, to confirm presence or absence of rare plants, pre-construction surveys should be conducted. Additionally, the survey reports indicate that rare plant surveys were conducted during a low rainfall year and recommend pre construction surveys to confirm presence or absence (AMEC 2008 and 2006). Figure E.2-2 shows the MSHCP area for the Pacific Clay portion of Alternative 5.

If rare or narrow endemic plants are identified during pre-construction surveys, implementation of mitigation measure MM BIO-1a and BIO-1b would reduce or avoid impacts. Further, additional avoidance and mitigation measures as outlined in MM BIO-1a and 1b (see D.4.3.3) would be used to minimize the possibility of inadvertent encroachment or if direct impacts to plants is to occur. If rare or narrow endemic plants are identified during pre-construction surveys, implementation of mitigation measure MM BIO-1a would reduce or avoid impacts. At the pre-construction survey stage,

mitigation measure MM BIO-1a would reduce or avoid impacts. At the pre-construction survey stage, project micrositing and engineering changes would no longer likely be feasible impact avoidance measures; however, the following measures would be used to minimize the possibility of inadvertent encroachment:

a. Flagging or otherwise marking sensitive plant species will be done by a trained local botanist. Construction crews will avoid direct or indirect impacts to these flagged areas. Construction personnel shall be instructed to avoid intrusion beyond these marked areas. b. Monitoring the known locations of special status plant populations that might be found prior to or during the construction period, using a trained professional botanist. Monitoring while construction is taking place in the vicinity of the special status plant populations and for one year following construction to assess the effectiveness of protection measures.

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Other Special Status Wildlife

Impacts to other special status wildlife species for the Pacific Clay portion of Alternative 5 would be less than significant, and those for Project route W-1B would be mitigated to a level of less than significant. This alternative avoids the portions of W-1B where a red-tailed hawk nest was observed in 2006, and where western spadefoot toads were identified. No other special status species were detected along the Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006).

Under MM BIO-1<u>d</u>^f, preconstruction surveys will be conducted by a <u>certified qualified</u> wildlife biologist for all terrestrial special status species as defined by Table D.4-2. The locations of any sensitive species, and their habitats, will be marked and avoided during final project design and construction. A qualified wildlife biologist will be on-site to conduct on-site biological monitoring for sensitive wildlife species including, but not limited to, those found in Table D.4-2.

Wetland and Riparian Habitat

Impacts to wetland and riparian habitat for both the Pacific Clay portion of Alternative 5 and the Project route W-1B would be mitigated to a level of less than significant (BIO-APMs 2, 4, and 7 and MM BIO-2<u>a and -2b</u>).

• Page E-21:

In areas where soil disturbance would be necessary near surface waters, such as locations where washes run parallel and adjacent to the Project route, impacts would be mitigated to a level of less than significant with implementation of mitigation measures (BIO-APMS 2, 4, and 7 and MMs BIO-2a through -2b).

• Page E-22:

E.2.6 Alternative 6: Construct the subtransmission line along segments E-2, C-8, C-9, W-3, W-13, and W-14 (Eastern Region Route Segment Alternative)

Alternative 6 would be identical to Alternative 5 except that alternative route segment E-2 would be used instead of E-1 (Figure E-1). Segment E-2 is approximately 1.8 miles longer than segment E-1.

Air Quality

Construction of the project along Alternative 6 would have similar air quality impacts as the Project. This alternative would require similar construction equipment and protocol. Although short-term, localized construction-related air quality impacts would occur at the level of the Project, a greater number of sensitive receptors would be exposed to air-borne particulate matter because this alternative would pass through several areas along segment E-2 that are more developed than segment E-1. Segment E-2 is also approximately 1.8 miles longer than segment E-1, which indicates that there would be greater construction impacts on air quality than the Project.

Land Use

Alternative 6 would have similar impacts on land use as the Project because the subtransmission line would pass along SR-74 and cross I-15, both of which are Eligible Scenic Highways. As with the proposed project, these land use impacts would be considered significant and unavoidable (Class I). Because Alternative 6 would pass along a longer stretch of SR-74 than the Project (Figure E-1), however, impacts on land use would be considered greater than those resulting from construction and operation of the Project.

In addition, Alternative 6 would pass through areas designated as Farmland of Local Importance and segment C-8B would be placed in a designated floodway, as indicated on the City of Lake Elsinore Land Use Map. With this alternative, a larger portion of Central Region segments would be within a 100-year floodplain. These impacts, however, are considered less than significant with mitigation.

Mineral Resources

Alternative 6 would not result in the loss of availability of a known mineral resource that would be of value to the region. Specifically, the clay production from the Pacific Clay mining facility would not be impacted by Alternative 6. The region's mineral resource recovery sites would not be affected. As a result, impacts to mineral resources would be less than from the Project.

Visual Resources

Alternative 6 would have similar impacts on visual resources as the Project because the subtransmission line would pass along SR-74 and cross I-15, both of which are Eligible Scenic Highways (segments C-8A, C-9C, and W-14B). As with the proposed project, these impacts would be considered significant and unavoidable (Class I). Because Alternative 6 would pass along a longer stretch of SR-74 than the Project (Figure E-1), however, impacts on visual resources would be considered greater than those resulting from construction and operation of the Project.

Other Environmental Topics

Although not a CEQA consideration, nuisances resulting from construction of the Project may also be of concern with regard to Alternative 6.

Conclusion and Relationship to Project Objectives

This alternative would not reduce any significant and unavoidable (Class I) impacts on air quality, land use, or visual resources associated with the Project to less than significant levels. Although, it would avoid a significant and unavoidable (Class I) impact on mineral resources and meet all of the Project's objectives, impacts on air quality, land use, and visual resources would be greater than those resulting from construction and operation of the Project.

4.7 Chapter F: Other CEQA Considerations

• Page F-1:

The County has enough temporary housing facilities to accommodate the approximate 94 construction workers during the 18 24-month construction period.

4.8 Chapter G: Mitigation Monitoring and Reporting

All of the new and revised mitigation measures listed in the Final EIR are presented in the updated Mitigation and Monitoring Plan (Chapter 6 of the Final EIR).

4.9 Chapter H: Public Participation

No changes were made to this section.

4.10 Chapter I: References

• Page I-1:

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• Page I-9:

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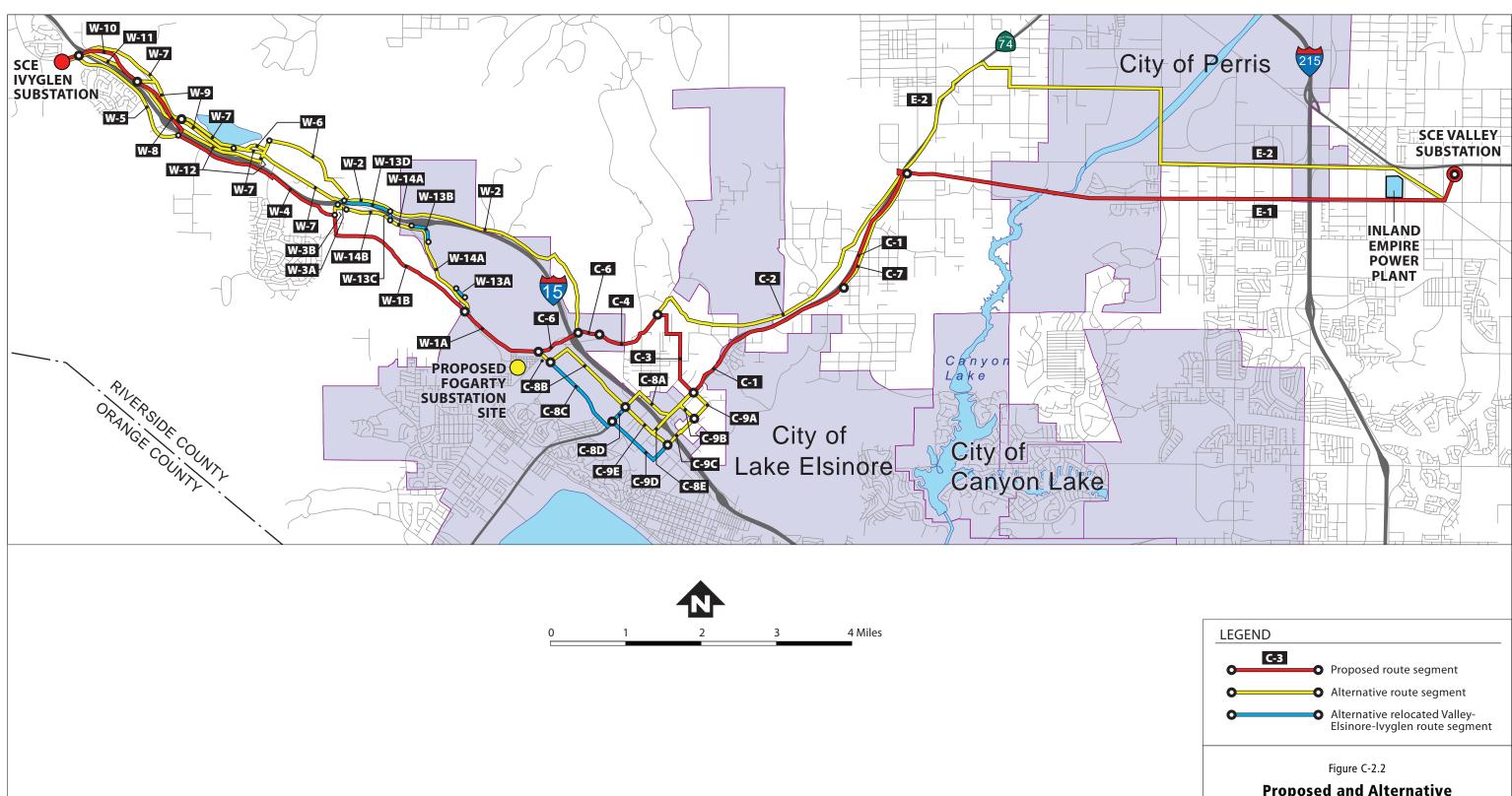
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4.11 Revised Figures

The following Draft EIR figures were revised as a result of responses to comments.

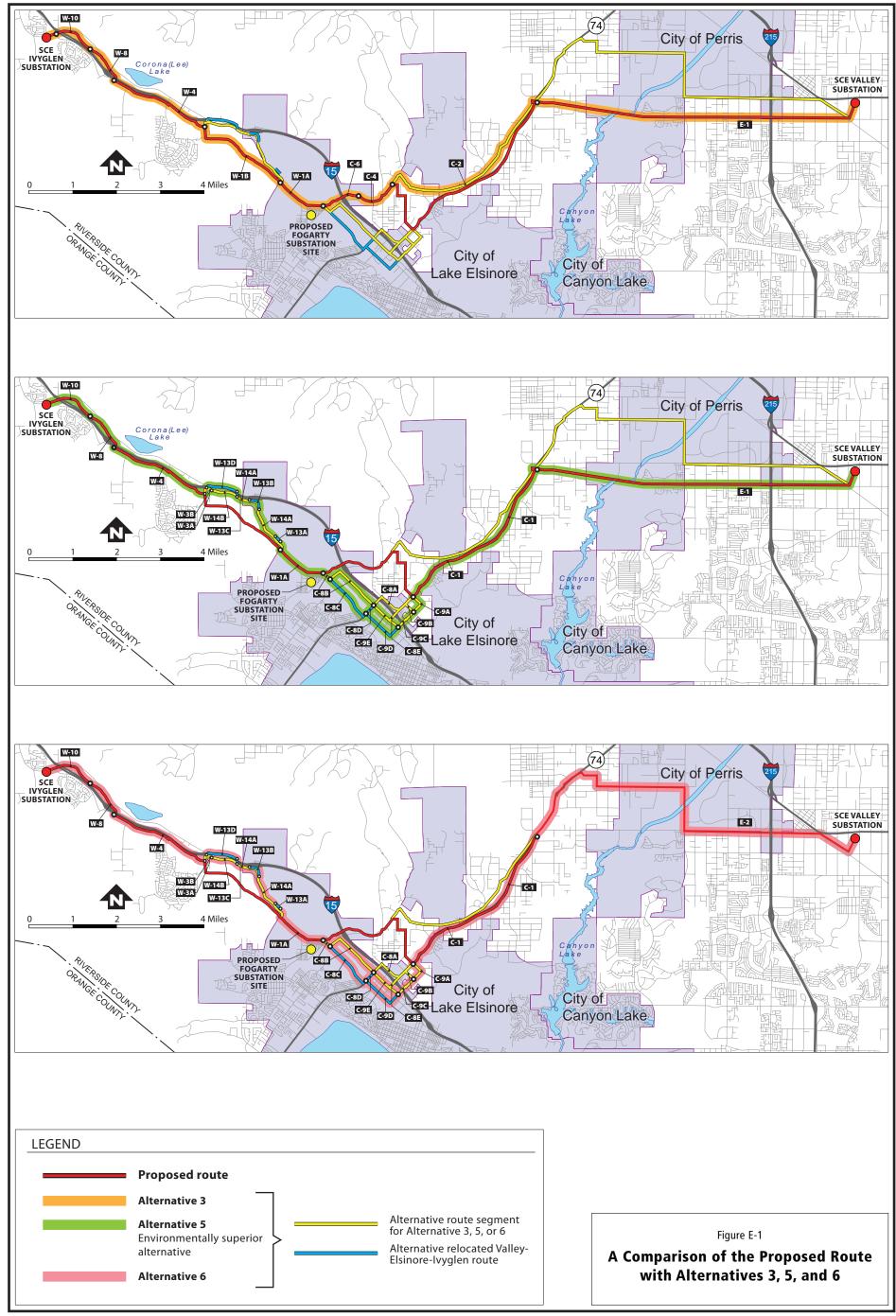
- Figure C.2-2
- Figure E-1



Proposed and Alternative Route Segments

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