

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

In the Matter of the Application of  
SOUTHERN CALIFORNIA EDISON  
COMPANY (U 338 -E) for a Permit to  
Construct Electrical Facilities With  
Voltages Between 50 kV and 200 kV:  
Fogarty Substation Project

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Application No. \_\_\_\_\_

(Filed xxxxxxxxxxxx)

**APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR A  
PERMIT TO CONSTRUCT ELECTRICAL FACILITIES WITH VOLTAGES BETWEEN  
50 kV and 200 kV: FOGARTY SUBSTATION PROJECT**

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### Abbreviations and Acronyms

AAQS	Ambient air quality standard
AB	Assembly Bill
AC	Alternating current
ACSR	Aluminum conductor steel reinforced
ADT	Average daily traffic
AHM	Acutely hazardous material
amsl	Above mean sea level
APE	Area of potential effect
APEFZA	Alquist-Priolo Earthquake Fault Zoning Act
AQCR	Air Quality Control Region
AQMP	Air Quality Management Plan
ARB	Air Resources Board
AST	Above ground storage tank
ASTM	American Society of Testing and Materials
BACM	Best available control measure
BEPA	Bald and Golden Eagle Protection Act
bgs	Below ground surface
BLM	Bureau of Land Management
BMPs	Best management practices
°C	Degrees Celsius
CAA	Clean Air Act
CAAQS	California ambient air quality standards
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDBG	Community Development Block Grant
CDC	California Department of Conservation
CDF	California Department of Forestry and Fire Protection
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDOC	California Department of Conservation
CDWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CETAP	Community and Environmental Transportation Acceptability Process
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
CGS	California Geological Survey (formerly the California Division of Mines and Geology)
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community noise equivalent level

CNF	Cleveland National Forest
CNPS	California Native Plant Society
CO	Carbon monoxide
COC	Chemicals of concern
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSC	California Species of Concern
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWPP	Community Wildfire Protection Plans
dB	Decibels
dBA	Decibels on the A-weighted scale
DC	Direct current
DO	Dissolved oxygen
DTSC	Department of Toxic Substances Control
EAC	Early action compact
EF	Emission factor
EIC	Eastern Information Center
EIR	Environmental Impact Report
ERME	Environmental Resources Management Element
ESA	Endangered Species Act
EVMWD	Elsinore Valley Municipal Water District
°F	Degrees Fahrenheit
FAA	Federal Aviation Administration
FBCC	Federal Birds of Conservation Concern
FE	Federal Endangered
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FT	Federal Threatened
GIS	Geographic Information System
GO	General Order
GPS	Global Positioning System
H <sub>2</sub> S	Hydrogen sulfide
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HAPs	Hazardous Air Pollutants
HFRA	Healthy Forests Restoration Act
HMBEP	Hazardous Materials Business Emergency Plans
HMBP	Hazardous Material Business Plan
HMI	Human machine interface
HSC	Health and Safety Code
HVAC	Heating, ventilating, air conditioning
Hz	Hertz
IEEE	Institute of Electrical and Electronics Engineers
kcmil	Thousand circular mils (electricity conductor)
kV	Kilovolt

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lb	Pound
Ldn	Day-night sound level
LDS	Light duty steel poles
Leq	Equivalent steady sound level that provides an equal amount of acoustical energy as the time-varying sound
LEUSD	Lake Elsinore Unified School District
LOS	Level of service
LST	Local significance thresholds
µg/m <sup>3</sup>	Micrograms per cubic meter
m <sup>3</sup>	Cubic meters
MBTA	Migratory Bird Treaty Act
MCE	Maximum credible earthquake
MEER	Mechanical and Electrical Equipment Room
mg/l	Milligrams per liter
mg/m <sup>3</sup>	Milligrams per cubic meter
MMCRP	Mitigation Monitoring, Compliance, and Reporting Program
MRZ	Mineral Resource Zones
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MV	Megavolt
MVA	Megavolt-ampere
MVAR	Megavolt ampere reactive
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	National Communities Conservation Plan
NERC	North American Energy Reliability Council
NHPA	National Historic Preservation Act
NO <sub>2</sub>	Nitrogen dioxide
NOI	Notice of Intent
NOx	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Properties
O <sub>3</sub>	Ozone
OES	Office of Emergency Services
OSHA	U.S. Occupational Safety and Health Administration
Pb	Lead
PEA	Proponent's Environmental Assessment
PM	Particulate matter
PM10	Particulate matter less than 10 microns
PM2.5	Particulate matter less than 2.5 microns
ppm	Parts per million
PTC	Permit to Construct
RCIP	Riverside County Integrated Project
RCOFD	Riverside County Fire Department
RCRA	Resource Conservation Recovery Act



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REC	Recognized environmental conditions
ROG	Reactive organic gas
ROW	Right-of-Way
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAC	Stranded aluminum conductor
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SAWPA	Santa Ana Watershed Project Authority
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAPCD	South Coast Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Soil Conservation Service
SE	State Endangered
SIP	State Implementation Plans
SMARA	Surface Mining and Reclamation Act
SO <sub>2</sub>	Sulfur dioxide
SOI	Sphere of Influence
SPCC	Spill Prevention Control and Countermeasure
SR	State Route
ST	State Threatened
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminants
TPQ	Total planning quantities
TQ	Threshold quantity
TSP	Tubular steel pole
UAB	Urban area boundaries
UBC	Uniform Building Code
ULSD	Ultra low-sulfur diesel
US EPA	U.S. Environmental Protection Agency
USA	Underground Service Alert
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UV	Ultraviolet
VAR	Volt ampere reactive
VOC	Volatile Organic Compound
WECC	Western Electricity Coordinating Council

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# ES: EXECUTIVE SUMMARY

## ES.1 Introduction

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### ES.1.1 BACKGROUND

This Proponent's Environmental Assessment (PEA) evaluates the potential environmental impacts of Southern California Edison Company's (SCE) proposed Fogarty Substation Project, a 115/12 kilovolt (kV) substation project (Proposed Project), and its alternatives, located in southwestern Riverside County. This portion of Riverside County is one of the fastest growing areas in the United States, and electrical demand is growing as a result of new homes and businesses built in recent years.

### ES.1.2 PROPOSED PROJECT

Southern California Edison Company has filed an application with the California Public Utilities Commission (CPUC) for a permit to construct (PTC) the Fogarty Substation Project. The Proposed Project includes the following components:

- Construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation
- Installation of three tubular steel poles (TSPs) to support two new 115 kV subtransmission line segments approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation
- Construction of six underground 12 kV distribution circuits
- Installation of new fiber optic cable and communication equipment to connect the proposed Fogarty Substation to SCE's existing telecommunication system

The Proposed Project would be located on a 6.6 acre parcel of SCE owned land located east of Terra Cotta Road, west of Dobler Street, south of Kings Highway and north of Hoff Avenue in the City of Lake Elsinore.

The purpose of the Proposed Project is to maintain system reliability and to serve projected electrical demand in the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County.

Construction is scheduled to begin in the third quarter of 2008. The Proposed Project is planned to be operational by June 2009.

## ES.2 Project Purpose, Need and Objectives

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### ES.2.1 PURPOSE AND NEED

The purpose of the Proposed Project is to ensure the availability of safe and reliable electric service to meet customer electrical demand in the urbanized areas of the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County (Electrical Needs Area). SCE's current forecast shows that the existing subtransmission facilities serving the Electrical Needs Area may exceed design-operating limits as early as 2007. The safety and reliability of the system must be maintained under normal conditions, when all facilities are in service, and under abnormal conditions resulting from equipment or line failures, maintenance outages, or outages that cannot be predicted or controlled.

The Proposed Project is needed to ensure the electrical distribution system has sufficient capacity to provide safe and reliable service to customers in the Electrical Needs Area.

### ES.2.2 PROJECT OBJECTIVES

California Environmental Quality Act (CEQA) and CEQA Guidelines (Section 15126.6(a)) require a description of a range of reasonable alternatives to the project, or 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. SCE has defined the following project objectives:

- Serve projected electrical demand requirements in the Electrical Needs Area beginning in 2009
- Maintain system reliability within the Electrical Needs Area
- Improve operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area
- Utilize SCE owned property for location of the project
- Meet project needs while minimizing environmental impacts
- Meet project needs in a cost-effective manner

SCE considered these objectives in developing a reasonable range of alternatives to the Proposed Project and to the location of the project.

## ES.3 Alternatives

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### ES.3.1 SYSTEM ALTERNATIVES

SCE considered three system alternatives and the No Project Alternative to meet the forecasted electrical demand within the Electrical Needs Area. These alternatives are listed below.

- **System Alternative 1:** The construction of a new 115/12 kV substation, extending the existing 115 kV subtransmission line into the new substation, and construction of six underground 12 kV distribution circuits within the Electrical Needs Area.

- **System Alternative 2:** The construction of a new 33/12 kV substation, reconfiguration of four existing 12 kV distribution lines and installation of three new underground 33 kV lines.
- **System Alternative 3:** No Project Alternative.

SCE recommends System Alternative 1 as the preferred System Alternative because it satisfies the project objectives. System Alternative 1 would provide the required additional capacity to the Electrical Needs Area. By supplying the source of power near the center of the Electrical Needs Area, SCE would be able to transfer electrical demand during normal and abnormal conditions, thus providing reliability and operational flexibility.

### ES.3.2 SITE ALTERNATIVES

SCE has identified the Project Area (Figure 2-1, Project Area) as the area in which the substation must be located in order to optimize load balancing and distribution line lengths. Within the Project Area, SCE identified potential substation sites of at least 3 acres and evaluated each potential site applying a series of criteria, including, but not limited to:

- The proximity of each site to SCE's existing subtransmission line infrastructure
- Engineering constraints imposed by each site
- The location of each site relative to growth within the Electrical Needs Area
- Relative compatibility with existing nearby land uses
- Relative compatibility with city and county land uses
- Potential environmental constraints imposed by each site

Based on the criteria listed above, SCE identified three possible substation sites (Figure 2-2, Alternative Project Sites). As discussed below, SCE's analysis indicates that Site Alternative A is preferred to Site Alternative B and Site Alternative C.

Site Alternative A was determined to be the preferred alternative substation site. SCE currently owns both Site Alternative A and Site Alternative B. Site Alternative A and Site Alternative B are each preferable to Site Alternative C because of their proximity to the load to be served, and to the location of four existing distribution circuits that will be served by the new substation. Site Alternatives A and B are also preferable to Site Alternative C because Terra Cotta Road will be improved as a condition of approval of the Alberhill and Lakeside Palms communities providing access for circuits to exit the new substation. As compared to Site Alternatives A and B, Alternative C would require significant distribution line extension to the four existing circuits currently served by the Dryden 33/12 kV Substation on undeveloped roads. When the areas are developed, the roads will likely be realigned and the lines would need to be relocated. Site Alternative C is located in close proximity to a blue line drainage southeast of the Site Alternative. This drainage could pose engineering and construction problems. Site Alternatives A and B are both compatible with surrounding land use designations, and poses the least engineering and environmental constraints to substation construction.

As compared to Site Alternative A, Site Alternative B would require significantly more grading and would require the construction of retaining walls. Site Alternative B would also require

protection or removal of known cultural resources. The temporary Dryden 33/12 kV Substation would not prevent construction on Site Alternative B; however, it would pose greater constraints to substation construction than Site Alternative A.

SCE recommends construction of System Alternative 1 with the substation facilities on site Alternative A (Fogarty Substation Project or Proposed Project).

## ES.4 Environmental Overview

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Potential environmental impacts associated with construction and operation of the Proposed Project are analyzed in Chapter 4 of this PEA using site specific information and field surveys. In the evaluation of each resource category and issue, the environmental setting is described, followed by a discussion of the regulatory framework, the identification of significance criteria or thresholds, and a description of potential environmental impacts and proposed mitigation, as needed. The impacts of each option and alternative are then described. A comparison of the impacts of each alternative is provided in Table 5-1, Comparison of Alternatives. A summary of the Proposed Project's impacts, Applicant proposed measures, and mitigation measures are provided in **Table ES-1**.

The Proposed Project would have less than significant impact or no impact with mitigation on all resource categories and issues.

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
<b><i>Aesthetics and Visual Resources</i></b>				
Have a substantial adverse effect on a scenic vista.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Substantially degrade the existing visual character or quality of the site and its surroundings.	LS/LS	<b>AES-SCE-1:</b> To reduce the potential for reflection of sunlight from the proposed poles, reduce color contrasts, and visually unify the Project with the surrounding characteristic landscape, SCE would: <ul style="list-style-type: none"> <li>Use only non-specular conductors</li> <li>Use tubular steel poles for the Proposed Subtransmission Line that will weather to be non-reflective</li> </ul>	No Mitigation Measures Required	LS/LS
		<b>AES-SCE-2:</b> To reduce the contrast and presence of the Proposed Subtransmission Line, SCE will order galvanized TSPs with a flat finish.		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LS/LS	<b>AES-SCE-1:</b> To reduce the potential for reflection of sunlight from the proposed poles, reduce color contrasts, and visually unify the Project with the surrounding characteristic landscape, SCE would: <ul style="list-style-type: none"> <li>• Use only non-specular conductors</li> <li>• Use tubular steel poles for the Proposed Subtransmission Line that will weather to be non-reflective</li> </ul>	No Mitigation Measures Required	LS/LS
<b>Agricultural Resources</b>				
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural uses.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Conflict with existing zoning for agricultural use, or a Williamson Act contract.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
<b>Air Quality</b>				
Conflict with or obstruct implementation of the applicable air quality plan.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	LS/LS	<b>AIR-SCE-1:</b> All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.	No Mitigation Measures Required	LS/LS
		<b>AIR-SCE-2:</b> All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.		
		<b>AIR-SCE-3:</b> When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.		
		<b>AIR-SCE-4:</b> Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		utilizing sufficient water or chemical stabilizer/suppressant.		
		<p><b>AIR-SCE-5:</b> Use of clean-burning, on-road and off-road diesel engines. Where feasible, heavy-duty diesel powered construction equipment manufactured after 1996 (with federally mandated “clean” diesel engines) would be utilized.</p> <p><b>AIR-SCE-6:</b> All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</p> <p><b>AIR-SCE-7:</b> Construction workers would carpool when possible.</p> <p><b>AIR-SCE-8:</b> Vehicle idling time would be minimized.</p> <p><b>AIR-SCE-9:</b> Limit traffic speeds on unpaved roads to 15 mph.</p> <p><b>AIR-SCE-10:</b> CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.</p> <p><b>AIR-SCE-11:</b> All off-road construction diesel engines not registered under CARB’s Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a</p>		

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program is considered to comply with this measure.</p> <p><b>AIR-SCE-12:</b> All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.</p>		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative threshold for ozone precursors).	LS/LS	<b>AIR-SCE-1:</b> All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.	No Mitigation Measures Required	LS/LS
		<b>AIR-SCE-2:</b> All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.		
		<b>AIR-SCE-3:</b> When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.		
		<b>AIR-SCE-4:</b> Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.		

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p><b>AIR-SCE-5:</b> Use of clean-burning, on-road and off-road diesel engines. Where feasible, heavy-duty diesel powered construction equipment manufactured after 1996 (with federally mandated “clean” diesel engines) would be utilized.</p> <p><b>AIR-SCE-6:</b> All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</p> <p><b>AIR-SCE-7:</b> Construction workers would carpool when possible.</p> <p><b>AIR-SCE-8:</b> Vehicle idling time would be minimized.</p> <p><b>AIR-SCE-9:</b> Limit traffic speeds on unpaved roads to 15 mph.</p> <p><b>AIR-SCE-10:</b> CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.</p> <p><b>AIR-SCE-11:</b> All off-road construction diesel engines not registered under CARB’s Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-</p>		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program is considered to comply with this measure.</p> <p><b>AIR-SCE-12:</b> All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.</p>		

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Expose sensitive receptors to substantial pollutant concentrations.	LS/NL	<b>AIR-SCE-1:</b> All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.	No Mitigation Measures Required	LS/NL
		<b>AIR-SCE-2:</b> All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.		
		<b>AIR-SCE-3:</b> When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.		
		<b>AIR-SCE-4:</b> Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.		
		<b>AIR-SCE-5:</b> Use of clean-burning, on-road and off-road diesel engines. Where feasible, heavy-duty diesel		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>powered construction equipment manufactured after 1996 (with federally mandated “clean” diesel engines) would be utilized.</p> <p><b>AIR-SCE-6:</b> All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</p> <p><b>AIR-SCE-9:</b> Limit traffic speeds on unpaved roads to 15 mph.</p> <p><b>AIR-SCE-10:</b> CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.</p> <p><b>AIR-SCE-11:</b> All off-road construction diesel engines not registered under CARB’s Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine.</p>		



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program is considered to comply with this measure.</p> <p><b>AIR-SCE-12:</b> All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.</p>		
Create objectionable odors affecting a substantial number of people.	LS/NI	No SCE Measures Proposed	No Mitigation Measures Required	LS/NI
<b>Biological Resources</b>				
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or	PS/LS	<b>BIO-SCE-1:</b> A qualified biologist will conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of applicable	<b>BIO – 1:</b> The limits of the long-spined spineflower population will be flagged or otherwise marked to ensure construction crews will avoid direct or indirect impacts to the population. Construction personnel shall be	LS/LS

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service		<p>environmental regulations, the need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project Site boundaries within which the Project activities must be accomplished.</p> <p><b>BIO-SCE-3:</b> The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.</p> <p><b>BIO-SCE-4:</b> Projects should be designed to avoid the placement of equipment and personnel within stream channels or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.</p>	<p>instructed to avoid intrusion beyond these marked areas.</p> <p>The known locations of special-status plant populations that might be found prior to or during the construction period will be monitored, using a trained professional botanist.</p> <p>Monitoring will occur during ground disturbing construction activity in the vicinity of the special-status plant populations to assure the effectiveness of protection measures. If impacts to the known location of the long-spined spineflower are unavoidable, seeds will be collected and the topsoil may be salvaged and stockpiled in identified upland work areas. After construction is complete, the salvaged topsoil will be spread over the disturbed area of the original population. Once the salvaged topsoil has been spread the seeds of the long-spined spineflower collected prior to construction will be spread throughout the original population location. Seeds will be collected during June prior to construction once the spineflower has senesced.</p>	

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p><b>BIO-SCE-5:</b> Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season special-status avian species if found to be present.</p> <p><b>BIO-SCE-8:</b> A qualified biologist shall monitor grading and soil movement activities for the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.</p> <p><b>BIO-SCE-10:</b> Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the Proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.</p>	<p><b>BIO – 2:</b> If breeding burrowing owls are found during the pre-construction surveys, the burrows will be flagged and an appropriate construction buffer will 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 California Department of Fish and Game will be contacted by the SCE biologist to determine relocation protocols and additional mitigation requirements.</p>	

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p><b>BIO-SCE-12:</b> All subtransmission poles would be designed to be raptor-safe in accordance with the Suggested Practices for Raptors on Power Lines: State of the Art in 1996 (Avian Power Line Interaction Committee 1996).</p>	<p><b>BIO – 5 Noise Control:</b> If nesting birds protected under federal or state regulations are located within the Project Area, then noise attenuation measures shall be implemented to prevent construction or operational noise from exceeding ambient levels during the nesting period. SCE shall minimize noise through careful work scheduling and having properly functioning mufflers on construction vehicles. In addition, to the extent practicable, no Project vehicles, chain saws, or heavy equipment will be operated within the exclusion zone until the nesting season is over or a qualified biologist has determined that nesting is finished and the young have fledged. If it is not practicable to avoid work within an exclusion zone around an active nest, work activities modified to minimize disturbance of nesting birds may proceed within these zones. If the biologist determines that particular activities pose a high risk of disturbing an active nest, the biologist will recommend additional, feasible measures to minimize the risk of nest disturbance. If work activities are</p>	

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
			found to result in harm to nesting birds, destruction of an active nest, or nest abandonment prior to fledging, the biologist will report this to the CDFG and USFWS.	
		<b>BIO-SCE-13:</b> Prior to installation of the poles, a survey would be conducted to locate any raptor or raven nests occurring on the existing poles. If nests are found on poles planned for replacement or modification, SCE would suspend work until the nests are inactive.	<b>BIO – 6 Pre-Construction Nesting Bird Surveys:</b> To avoid the potential abandonment or removing active nests (with eggs or young) of any special status or non-special-status migratory birds and raptors, SCE will implement one of the following: <ul style="list-style-type: none"> <li>Conduct all construction activity (including vegetation pruning or removal) during the non-breeding season (generally between August 16 and February 28) for most special-status and non-special-status migratory birds</li> </ul> <p>If construction activities are scheduled to occur during the breeding season (generally between March 1 and August 15), a qualified wildlife biologist will conduct pre-construction focused nesting surveys prior to any ground disturbing activity, tree trimming or vegetation removal activities</p>	
		<b>BIO-SCE-14:</b> Construction work plans/schedules will be designed to	<b>BIO – 7 Long-Term Maintenance of Spineflower Habitat:</b> Potential	

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		minimize construction-related noise in sensitive areas when feasible. In addition, all construction equipment will maintain functional exhaust/muffler systems and idling of motors, except as necessary (e.g., concrete mixing trucks), shall be limited.	operation impacts to the location and population of long-spined spineflower have been identified as vehicle trespass, vegetation clearance or herbicide application, and conflicts with future landscape plans. The following elements will be implemented to reduce impacts to the long-spined spineflower population: <ul style="list-style-type: none"> <li>Protection from vehicular trespass for the population</li> <li>Restrictions upon, or conditions under which vegetation clearance or herbicide application could occur</li> </ul> Integration with future landscape plans for the facility	
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service	PS/NI	<b>BIO-SCE-1:</b> A qualified biologist will conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of applicable environmental regulations, the need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the	<b>BIO – 3 Erosion Control:</b> The BMPs included in the SWPPP will be implemented during construction to minimize impacts associated with erosion. BMPs will include the installation of sediment and erosion control structures to protect biological resources, including streams, as well as roadways and adjacent properties. Watering for dust control during construction will also be employed.	LS/NI

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>Project, and the access routes to and Project Site boundaries within which the Project activities must be accomplished.</p> <p><b>BIO-SCE-2:</b> Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.</p> <p><b>BIO-SCE-3:</b> The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.</p> <p><b>BIO-SCE-4:</b> Projects should be designed to avoid the placement of equipment and personnel within stream channels or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.</p> <p><b>BIO-SCE-6:</b> Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG,</p>	<p><b>BIO – 4 Reducing hydrologic impacts:</b> Potential hydrologic impacts would be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water.</p>	

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.		
		<b>BIO-SCE-7:</b> Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.		
		<b>BIO-SCE-8:</b> A qualified biologist shall monitor grading and soil movement activities for the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.		
		<b>BIO-SCE-9:</b> The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.		
		<b>BIO-SCE-10:</b> Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the Proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion		



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.		
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	NI/NI	No SCE Proposed Measures	No Mitigation Measures Required	NI/NI
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	NI/NI	No SCE Proposed Measures	No Mitigation Measures Required	NI/NI
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	NI/NI	No SCE Proposed Measures	No Mitigation Measures Required	NI/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	LS/NI	No SCE Proposed Measures	No Mitigation Measures Required	LS/NI
<b>Cultural Resources</b>				
Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5.	NI/NI	No SCE Proposed Measures.	No Mitigation Measures Required	NI/NI
Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.	NI/NI	<b>CULT-SCE-1:</b> If previously unidentified cultural resources are unearthed during construction activities, construction shall be halted in the immediate 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, determine eligibility for the NRHP, avoid (preserve), or recover the resources such that the information value of eligible resources.	No Mitigation Measures Required	NI/NI

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	PS/NI	No SCE Measures Proposed	<b>CULT – 1:</b> Paleontological monitoring shall occur while conducting any ground disturbing activities, including but not limited to grading, trenching, and tunneling, on the Project Site. The paleontological monitor shall have the authority to halt any activities adversely impacting potentially significant resources, and said resources must be recovered, analyzed, and curated with an appropriate repository.	LS/NI
Disturb any human remains, including those interred outside of formal cemeteries.	LS/NI	<b>CULT-SCE-2:</b> If human remains are encountered during the construction or any other phase of development, work in the area of the discovery shall 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 the origin pursuant to Public Resources Code 5097.98-99, Health and Safety Code 7050.5. If the remains are determined to be Native American, the Native American Heritage Commission (NAHC) would be notified within 24 hours as required by Public Resources Code 5097. The NAHC would notify the designated Most Likely Descendant who would provide	No Mitigation Measures Required	LS/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		recommendations for the treatment of remains within 24 hours. The NAHC mediates any disputes regarding treatment of remains. SCE would implement recommendations as required.		
<b>Geology, Soils and Seismicity</b>				
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic shaking; seismic-related ground failure, including liquefaction; or landslides	LS/LS	<p><b>GEO-SCE-1:</b> SCE seismic design specifications for the improvements at the substations would be based on criteria presented by the Institute of Electrical and Electronics Engineers provisions set forth in its "Recommended Practices for Seismic Design of Substations." However, the foundations shall be designed in compliance with CBC-2001, UBC-1997 and anchorage loads as provided by equipment manufacturers, whichever is more severe.</p> <p><b>GEO-SCE-2:</b> Prior to final grading plans and design of substation equipment foundations, a geotechnical and engineering geology study would be performed to identify site-specific soil and geologic conditions in enough detail to support final engineering and the requirements of reviewing agencies. Recommendations from the geotechnical and engineering geology</p>	No Mitigation Measures Required	LS/LS

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		study would be incorporated into the final project design.		
Result in substantial soil erosion or the loss of topsoil	LS/Nl	<b>GEO-SCE-3:</b> Substation improvements and construction activities would be performed in accordance with the soil erosion and sediment containment measures specified in the Construction SWPPP. Implementation of the SWPPP would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The construction SWPPP would identify BMPs to be implemented during construction activities. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. SCE would obtain a grading permit.	No Mitigation Measures Required	LS/Nl
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	LS/LS	<b>GEO-SCE-2:</b> Prior to final grading plans and design of substation equipment foundations, a geotechnical and engineering geology study would be performed to identify site-specific soil and geologic conditions in enough detail to support final engineering and the requirements of reviewing agencies. Recommendations from the geotechnical and engineering geology study would be incorporated into the final project design.	No Mitigation Measures Required	LS/LS

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property	LS/LS	<b>GEO-SCE-2:</b> Prior to final grading plans and design of substation equipment foundations, a geotechnical and engineering geology study would be performed to identify site-specific soil and geologic conditions in enough detail to support final engineering and the requirements of reviewing agencies. Recommendations from the geotechnical and engineering geology study would be incorporated into the final project design.	No Mitigation Measures Required	LS/LS
Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
<b>Hazards and Hazardous Materials</b>				
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	LS/LS	<b>HAZ-SCE-1:</b> SCE would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) prior to initiating construction activities. The SWPPP would utilize BMPs to address the storage and handling of hazardous materials during construction activities.  <b>HAZ-SCE-3:</b> SCE would prepare and implement a Spill Prevention, Control and Countermeasure plan (SPCC) prior to transporting any oil containing equipment to the site.	No Mitigation Measures Required	LS/LS

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	LS/LS	<b>HAZ-SCE-1:</b> SCE would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) prior to initiating construction activities. The SWPPP would utilize BMPs to address the storage and handling of hazardous materials during construction activities. <b>HAZ-SCE-3:</b> SCE would prepare and implement a Spill Prevention, Control and Countermeasure plan (SPCC) prior to transporting any oil containing equipment to the site.	No Mitigation Measures Required	LS/LS
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	LS/LS	<b>HAZ-SCE-2:</b> SCE would implement standard fire prevention and response measures. The standards address spark arresters, smoking and fire rules, storage and parking areas, use of gasoline-powered tools, road closures, use of a fireguard, fire suppression tools, fire suppression equipment, and training requirements. Portable communication devices (i.e. radio or mobile telephones) would be available to construction personnel.	No Mitigation Measures Required	LS/LS
<b>Hydrology and Water Resources</b>				
Violate any water quality standards or waste discharge requirements.	LS/LS	<b>HYDRO-SCE-1:</b> A SWPPP (for Construction and Operations) would be submitted to Riverside County along with grading permit applications. Implementation of the Plan would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan	No Mitigation Measures Required	LS/LS



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the Construction SWPPP. A silting basin(s) would be established, as necessary, to capture</p>		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.		
		<b>HYDRO-SCE-2:</b> An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and SWPPP measures, to all field personnel. A formal monitoring program would be implemented to ensure that the plans are followed throughout the construction period.		
		<b>HYDRO-SCE-3:</b> The Construction SWPPP would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP 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.		

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).	NI/LS	No SCE Proposed Measures	No Mitigation Measures Required	NI/LS
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	LS/LS	<b>HYDRO-SCE-1:</b> A SWPPP (for Construction and Operations) would be submitted to Riverside County along with grading permit applications. Implementation of the Plan would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During	No Mitigation Measures Required	LS/LS

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the Construction SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.</p>		

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p><b>HYDRO-SCE-2:</b> An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and SWPPP measures, to all field personnel. A monitoring program would be implemented to ensure that the plans are followed throughout the construction period.</p>		
		<p><b>HYDRO-SCE-3:</b> The Construction SWPPP would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP 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.</p>		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	LS/LS	No SCE Proposed Measures	No Mitigation Measures Required	LS/LS
Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	LS/LS	No SCE Proposed Measures	No Mitigation Measures Required	LS/LS
Otherwise substantially degrade water quality.	LS/LS	<b>HYDRO-SCE-1:</b> A SWPPP (for Construction and Operations) would be submitted to Riverside County along with grading permit applications. Implementation of the Plan would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other	No Mitigation Measures Required	LS/LS

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		<p>suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the Construction SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.</p> <p><b>HYDRO-SCE-2:</b> An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and SWPPP measures, to all field personnel. A</p>		

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
		monitoring program would be implemented to ensure that the plans are followed throughout the construction period.		
		<b>HYDRO-SCE-3:</b> The Construction SWPPP would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP 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.		
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Place within a 100-year flood hazard area structures which would impede or redirect flood flows.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Inundation by seiche, tsunami, or mudflow.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
<b>Land Use and Planning</b>				
Physically divide an established community	LS/LS	No SCE Measures Proposed	No Mitigation Measures Required	LS/LS
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect	LS/LS	No SCE Measures Proposed	No Mitigation Measures Required	LS/LS
Conflict with any applicable habitat conservation plan or natural community conservation plan.	LS/NI	No SCE Proposed Measures	No Mitigation Measures Required	LS/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
<b>Mineral Resources</b>				
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
<b>Noise</b>				
Expose persons to or cause generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LS/NI	No SCE Measures Proposed	No Mitigation Measures Required	LS/NI
Expose persons to or cause generation of excessive ground-borne vibration or ground-borne noise levels.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	NI/LS	No SCE Measures Proposed	No Mitigation Measures Required	NI/LS
Create a substantial temporary or periodic increase in ambient noise	LS/LS	<b>NOISE-SCE-1:</b> All construction and general maintenance activities, except in an emergency, shall be limited to the	No Mitigation Measures Required	LS/LS

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
levels in the project vicinity above levels existing without the project.		hours of 7:00 a.m. to 7:00 p.m. and prohibited on Sundays and all legally proclaimed holidays.	No Mitigation Measures Required	
		<b>NOISE-SCE-2:</b> Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.		
		<b>NOISE-SCE-3:</b> Construction traffic shall be routed away from residences and schools, where feasible.		
		<b>NOISE-SCE-4:</b> Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A "common sense" approach to vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.)		
For a project located within an airport land use plan or, where such a plan has not been adopted,	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
within two miles of a public airport or public use airport, expose people residing or working in the Project Area to excessive noise levels.				
For a project within the vicinity of a private airstrip, expose people residing or working in the Project Area to excessive noise levels.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
<b>Population and Housing</b>				
Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
<b>Public Services</b>				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services (fire protection, police protection, schools, parks or other public facilities).	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
<b>Recreation</b>				
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Include recreational facilities or require the construction of recreational facilities, which might have an adverse physical effect on the environment.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
<b>Traffic and Transportation</b>				
Cause an increase in traffic, which is substantial in relation to the existing traffic loads and capacity of the street system.	LS/LS	<b>TRANS-SCE-1:</b> SCE shall consult with Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore, to schedule construction activities that may affect traffic.	No Mitigation Measures Required	LS/LS
Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.	LS/LS	<b>TRANS-SCE-2:</b> If lane closures are required, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Control Committee 1996). These measures might include the use of cones, flagmen, detours, or performance of construction at night if work requires equipment or personnel operation within the road right-of-way. <b>TRANS-SCE-4:</b> Trucks would use designated truck routes whenever possible.	No Mitigation Measures Required	LS/LS
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS/NL	No SCE Measures Proposed	No Mitigation Measures Required	LS/NL
Result in inadequate emergency access.	NI/NI	<p><b>TRANS-SCE-1:</b> SCE shall consult with Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore, to schedule construction activities that may affect traffic.</p> <p><b>TRANS-SCE-2:</b> If lane closures are required, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Control Committee 1996). These measures might include the use of cones, flagmen, detours, or performance of construction at night if work requires equipment or personnel operation within the road right-of-way.</p>	No Mitigation Measures Required	NI/NI
Result in inadequate parking capacity.	LS/NL	<p><b>TRANS-SCE-3:</b> SCE would limit the number of trips required by encouraging carpooling.</p> <p><b>TRANS-SCE-5:</b> SCE would encourage parking in areas that would not have adverse impacts to existing parking availability.</p>	No Mitigation Measures Required	LS/NL

Table ES-1: Potential Impacts and Mitigation Measures				
Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).	LS/NI	<b>TRANS-SCE-3:</b> SCE would limit the number of trips required by encouraging carpooling.	No Mitigation Measures Required	LS/NI
<b>Utilities and Service Systems</b>				
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements are needed.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI



**Table ES-1: Potential Impacts and Mitigation Measures**

Impact	Significance Before Mitigation Construction/ Operation	Applicant Proposed Measures	Mitigation Measures	Significance After Mitigation Construction/ Operation
Result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI
Comply with federal, state, and local statutes and regulations related to solid waste.	NI/NI	No SCE Measures Proposed	No Mitigation Measures Required	NI/NI

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# 1: PURPOSE AND NEED

## 1.1 Project Overview

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Southern California Edison Company (SCE) proposes to construct the Fogarty Substation Project (as described in Section 2.5 and referred to as the Proposed Project) to maintain system reliability and serve projected electrical demand in the urbanized areas of the City of Lake Elsinore and adjacent areas of the southwestern portion of Riverside County (Electrical Needs Area, as shown on **Figure 1-1, Regional Map** and **Figure 1-2, Electrical Needs Area**). The Proposed Project would be located adjacent to Alberhill Ranch and Lakeside Palms residential developments in the City of Lake Elsinore (Project Area). The Proposed Project is planned to be operational by June 2009 to ensure that safe and reliable electric service is available to serve customer electrical demands in the Electrical Needs Area. Construction is scheduled to begin in the third quarter of 2008.

The Proposed Project includes the following elements:

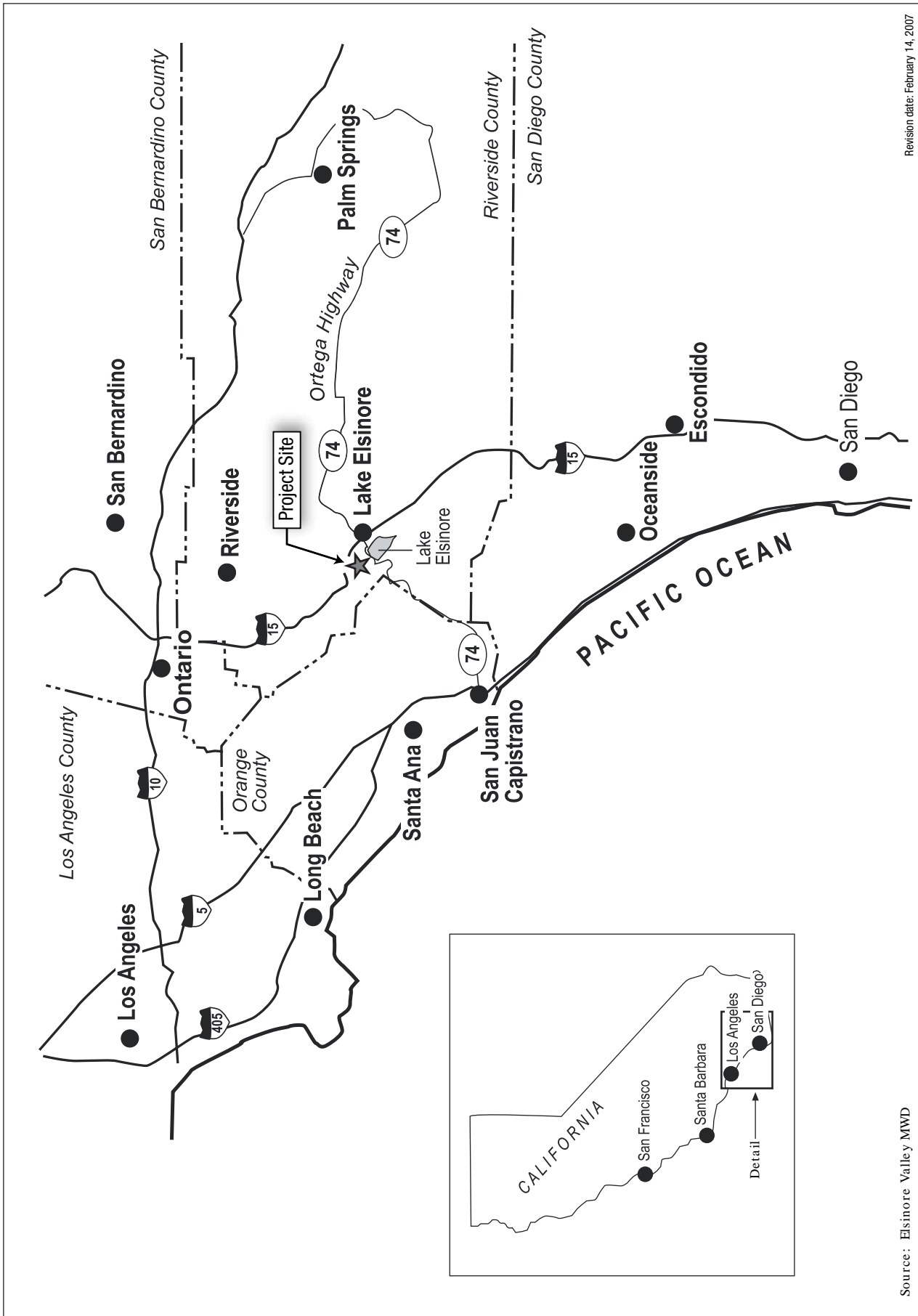
- Construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation
- Installation of three tubular steel poles (TSPs) to support two new 115 kV subtransmission line segments approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation
- Construction of six underground 12 kV distribution circuits
- Installation of new fiber optic cable and communication equipment to connect the proposed Fogarty Substation to SCE's existing telecommunication system

## 1.2 Project Purpose

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The purpose of the Proposed Project is to ensure the availability of safe and reliable electric service to meet customer electrical demand. SCE's current forecast shows that the existing subtransmission facilities serving the Electrical Needs Area may exceed design-operating limits as early as 2007. The safety and reliability of the system must be maintained under normal conditions, when all facilities are in service, and under abnormal conditions resulting from equipment or line failures, maintenance outages, or outages that cannot be predicted or controlled.

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Source: Elsinore Valley MWD

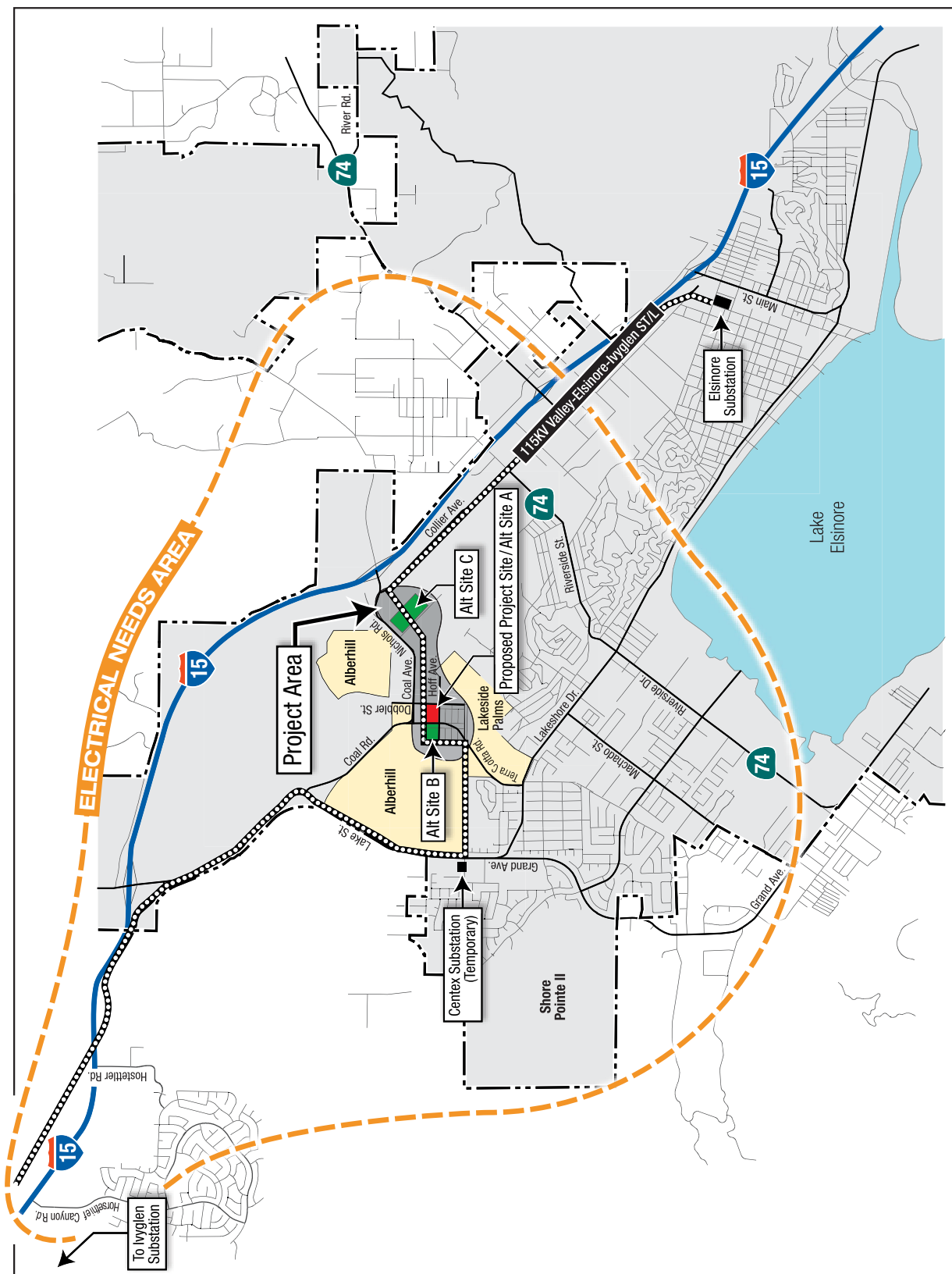
Revision date: February 14, 2007



FOGARTY SUBSTATION – PROPOSER'S ENVIRONMENTAL ASSESSMENT

# Regional Map

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Source: Southern California Edison, 2006

Revision date: March 12, 2007



FOGARTY SUBSTATION – PROPONENT'S ENVIRONMENTAL ASSESSMENT

## Electrical Needs Area



FIGURE 1-2

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## 1.3 Project Need

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The Electrical Needs Area is currently served by SCE's Centex 33/12 kV, Dryden 33/12 kV, and Elsinore 115/12 kV and 115/33 kV substations. These substations provide electrical service to approximately 14,300 metered customers and for several rapidly growing developments within the Electrical Needs Area.

Currently, the amount of electrical power that can be delivered into the Electrical Needs Area is limited to the maximum amount of combined electrical power that the Centex, Dryden, and Elsinore substations can transmit before their operating capacity limits are exceeded. As shown in **Table 1-1, Electrical Needs Area Substation Capacity and Peak Demand**, the combined operating capacity of the three substations is presently limited to 108.6 MVA under normal operating conditions. The Centex 33/12 kV Substation reached capacity in 2005 and the land lease for this substation will expire in 2007. As a result, Dryden 33/12 kV Substation was constructed as a temporary facility to assist in serving the existing load, and to accommodate the load that will be transferred from Centex Substation in 2007. The designed capacity of Dryden Substation will not be sufficient to serve future demand of the Electrical Needs Area. Dryden Substation will therefore be removed once permanent facilities are constructed.

The Southern California Association of Governments forecast that over the next 20 years, the City of Lake Elsinore will have a population increase of 28,130 resulting in roughly 9,030 new residential units<sup>1</sup>. As shown in Figure 1-2, the Proposed Project would serve the new developments of Alberhill Ranch and Lakeside Palms within the City of Lake Elsinore.

SCE's planning process is designed to ensure that the required capacity and operational flexibility is available to safely and reliably meet the projected peak electrical demands during periods of extreme heat under normal and abnormal conditions. Periods of extreme heat are defined as time periods when the temperature exceeds the ten-year average peak temperature and are termed "1-in-10 year heat storms". SCE adjusts the normal condition peak demand to reflect the forecasted peak demand during a 1-in-10 year heat storm. When this adjusted peak demand exceeds the maximum operating limits of the existing electrical facilities, a project is proposed to keep the electrical system within specified loading limits.

In 2006, the normal condition peak demand for Centex, Dryden, and Elsinore substations was collectively 85.2 MVA. The 2006 peak demand, as adjusted for a 1-in-10 year heat storm, was 93.4 MVA. SCE 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 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 1-1 is graphically represented in **Figure 1-3, Electrical Needs Area – Capacity and Peak Demand**.

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<sup>1</sup> Population and Housing estimations based on Southern California Association of Governments 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report.

<b>Table 1-1: Electrical Needs Area Substation Capacity and Peak Demand</b>					
<b>Planned Capacity and Projected Demand</b>	<b>2006*</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Planned Maximum Operating Limit (MVA)	108.6	108.6	108.6	108.6	108.6
Projected Peak Demand Normal Conditions (MVA)	85.2	90.7	96.6	104.2	111.3
Projected Peak Demand 1-in-10 Year Heat Storm (MVA)	93.4	96.5	102.8	114.2	122.0
<b>Planned Capacity and Projected Demand</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Planned Maximum Operating Limit (MVA)	108.6	108.6	108.6	108.6	108.6
Projected Peak Demand Normal Conditions (MVA)	117.3	119.5	125.4	133.6	141.7
Projected Peak Demand 1-in-10 Year Heat Storm (MVA)	128.5	130.9	137.5	146.4	155.3
*Actual recorded data.					

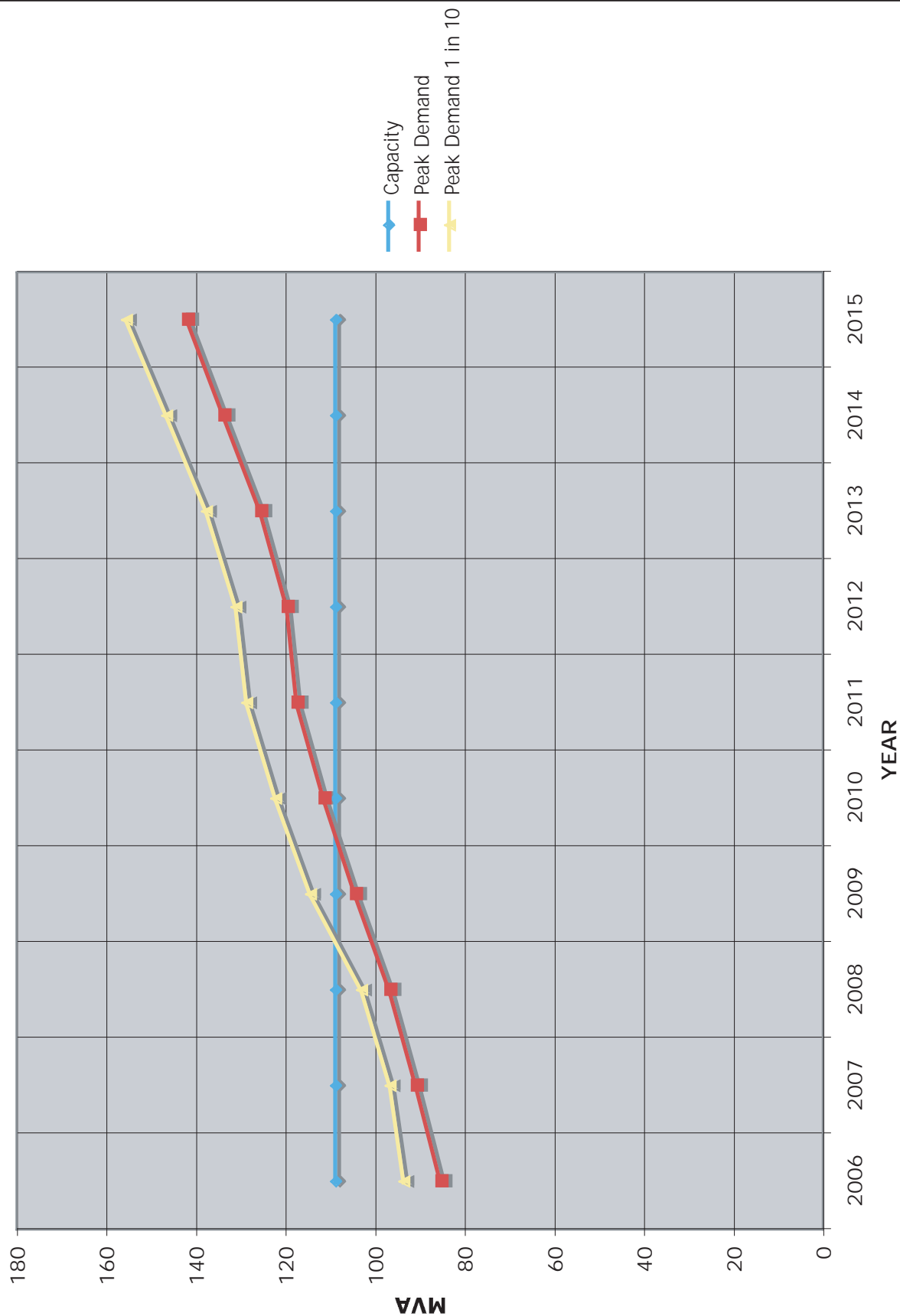
By 2009, the peak demand for a 1-in-10 year heat storm is forecast to be 114.2 MVA. In 2007, the Centex 33/12 kV Substation will be retired due to the expiration of the non-renewable land lease and SCE will be required to remove all distribution facilities from that location. Accordingly, projected electrical demand would need to be provided by existing facilities at Dryden (temporary facility) and Elsinore substations. The projected electrical demand for 2009 exceeds the operating limits of the existing transformers at the Dryden and Elsinore substations. Unless system upgrades are installed, SCE projects that by 2009, Dryden and Elsinore substations will exceed their maximum ratings under both normal and abnormal operating conditions.

In addition to transformer capacity, the distribution facilities must meet minimum voltage levels. As a distribution line increases in length and more load is demanded from the line, the voltage to the end user decreases, resulting in reliability problems. The distribution lines that serve the Electrical Needs Area originate from Elsinore, Centex, and Dryden substations. These distribution lines range in length from 5 to 7 miles. Presently, various sections of the Electrical Needs Area are experiencing low voltage conditions caused by long distribution lines. Residential developments in the Electrical Needs Area have brought greater electrical demand, and to be able to accommodate the greater demand and future growth, the distribution lines need to be shortened to maintain adequate voltage levels at the end of the lines and allow operational flexibility. The shorter distribution line lengths allow SCE to transfer load between distribution lines and between substations in response to variations in demand. The shorter distribution line lengths also reduce the possibility of overloading the equipment, which can lead to equipment failure. Finally, shorter distribution line lengths are also necessary to maintain CPUC-mandated voltage levels. Therefore, SCE is proposing a project to ensure the electrical distribution system has sufficient capacity to provide safe and reliable service to customers in the Electrical Needs Area.

## **1.4 Project Objectives**

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California Environmental Quality Act (CEQA) and CEQA Guidelines (Section 15126.6(a)) require a description of a range of reasonable alternatives to the project, or 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. SCE has defined the following project objectives:



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FOGARTY SUBSTATION – PROPOSER'S ENVIRONMENTAL ASSESSMENT

## Electrical Needs Area – Capacity and Peak Demand

FIGURE 1-3

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- Serve projected electrical demand requirements in the Electrical Needs Area beginning in 2009
- Maintain system reliability within the Electrical Needs Area
- Improve operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area
- Utilize SCE owned property for location of the project
- Meet project needs while minimizing environmental impacts
- Meet project needs in a cost-effective manner

SCE considered these objectives in developing a reasonable range of alternatives to the project and to the location of the project. Chapter 2 describes the alternatives development process and the selection of alternatives for analysis in this Proponent's Environmental Assessment (PEA).

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# 2: PROJECT ALTERNATIVES

California Environmental Quality Act (CEQA) and CEQA Guidelines (Section 15126.6(a)) require that an environmental impact report describe a range of reasonable 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, and evaluate the comparative merits of the alternatives. CEQA Guidelines (Section 15126.6(d)) require that sufficient information about each alternative be included to allow meaningful evaluation, analysis, and comparison with the proposed project. In addition, CEQA Guidelines Section 15126.6(e) requires the evaluation of “no project” alternative to compare the impacts of approving the proposed project with the impacts of not approving the proposed project (No Project Alternative).

The following sections describe the methodology for screening system alternatives and site alternatives. Alternatives developed by these methodologies are analyzed for their ability to meet the project objectives. This chapter concludes with a brief description of the alternatives retained for full analysis in this Proponent’s Environmental Assessment (PEA).

## 2.1 System Alternative Evaluation Methodology

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The development of system alternatives consists of a four step process summarized below:

**Step 1.** Perform technical engineering analyses to determine whether the forecasted peak electrical demand can be accommodated by modifying the existing electrical infrastructure.

**Step 2.** Develop system alternatives if the forecasted electrical demand cannot be accommodated by modifying the existing electrical infrastructure, and considering feasible upgrades or additions to the existing electrical infrastructure.

**Step 3.** Evaluate each system alternative in consideration of the extent to which an alternative could feasibly accomplish the proposed project objectives.

**Step 4.** Eliminate the alternative from further consideration if it is not feasible. If feasible, the alternative is retained for full analysis in the PEA.

### 2.2 System Alternatives

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Three system alternatives were considered to determine whether they met the project objectives.

**System Alternative 1:** The construction of a new 115/12 kV substation, extending the existing 115 kV subtransmission line into the new substation, and construction of six underground 12 kV distribution circuits within the Electrical Needs Area.

**System Alternative 2:** The construction of a new 33/12 kV substation, reconfiguration of four existing 12 kV distribution lines and installation of three new underground 33 kV lines.

**System Alternative 3:** No Project Alternative.

Each of these alternatives is evaluated against the project objectives in the following sections.

#### 2.2.1 SYSTEM ALTERNATIVE 1

System Alternative 1 includes the following elements:

- Construction of a new 115/12 kV substation (Fogarty Substation) centrally located in the Electrical Needs Area. The Fogarty Substation would be an unmanned, low-profile, 56 megavolt ampere (MVA), 115/12 kV substation
- Installation of a 115 kV switch rack, two 115/12 kV 28 MVA transformers, a 12 kV switch rack, and two 4.8 mega volt-ampere reactive (MVAR) 12 kV capacitor banks
- Six underground 12 kV distribution circuits (four existing and two new) would be connected from the substation to Terra Cotta Road
- Installation of three tubular steel poles and the addition of two new overhead 115 kV subtransmission line segments approximately 200 feet each, from the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line into the proposed Fogarty Substation
- Installation of two new underground 24-strand fiber optic cable segments between the Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen substations. New telecommunication equipment would be installed in the Fogarty Substation Mechanical Electrical-Equipment Room (MEER)

The planned in-service date for the Fogarty Substation Project is June 2009. The estimated cost of System Alternative 1 is projected at approximately \$11.2 million. Additional components, such as, new telecommunications lines, are not included in the cost estimate.<sup>1</sup>

#### 2.2.2 SYSTEM ALTERNATIVE 2

System Alternative 2 would consist of upgrades at SCE's Elsinore 115/33 kV Substation, the

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<sup>1</sup> The project cost, including new telecommunications lines is projected at approximately \$12.7 million.



construction of a new 33/12 kV substation, reconfiguration of four 12 kV distribution lines, and installation of three new underground 33 kV distribution lines. Additionally, the acquisition of adjacent property to the east of Elsinore Substation would be required to extend the existing 33 kV bus (a conductor used to collect, carry, and distribute powerful electrical current) to accommodate the addition of three new 33 kV lines. The installation of approximately 16 miles of new 33 kV underground lines would be needed to deliver power to the new 33/12 kV substation. The estimated cost of System Alternative 2 is projected at approximately \$30 million. Additional components, such as new telecommunications lines, are not included in the cost estimate.

### **2.2.3 SYSTEM ALTERNATIVE 3**

Under the No Project Alternative, no action would be taken. Therefore, this alternative would render SCE unable to provide sufficient, reliable service to the Electrical Needs Area and require SCE to serve the Electrical Needs Area from the existing electrical system with no upgrades or modifications. As discussed above, the electric demand in the Electrical Needs Area would exceed capacity by 2009. This alternative would result in a reduced level of reliability, and possibly cause customers to experience power outages. Additionally, the No Project Alternative would result in noncompliance with the CPUC-mandated voltage levels, and would not meet the project objectives as defined in Section 1.4.

### **2.2.4 SYSTEM ALTERNATIVE RECOMMENDATION**

SCE recommends System Alternative 1 as the preferred System Alternative because it satisfies the project objectives, which are to:

- Serve projected electrical demand requirements in the Electrical Needs Area beginning in 2009
- Maintain system reliability within the Electrical Needs Area
- Improve operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area
- Utilize SCE owned property for location of the project
- Meet project needs while minimizing environmental impacts
- Meet project needs in a cost-effective manner

System Alternative 1 would provide the required additional capacity to the Electrical Needs Area. By supplying the source of power near the center of the Electrical Needs Area, SCE would be able to transfer electrical demand during normal and abnormal conditions, thus providing reliability and operational flexibility.

System Alternative 2 offers only an interim solution, and does not meet the project objectives of maintaining system reliability and enhancing operational flexibility. The three new 33 kV circuits necessary to feed the new 33/12 kV substation would have to be constructed underground requiring approximately 11 miles of trenching. System Alternative 2 does not eliminate the need for a new substation in the Electrical Needs Area in the future. System Alternative 2 would only

## 2: PROJECT ALTERNATIVES

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provide a maximum of 56 MVA capacity which would only serve the projected load through 2015. System Alternative 2 is therefore eliminated from further consideration in this PEA.

System Alternative 3, the No Project Alternative, is not a viable option because it would prevent SCE from providing safe and reliable electrical service to its customers in the Electrical Needs Area. System Alternative 3, the No Project Alternative, is therefore eliminated from further consideration in this PEA.

## 2.3 Site Alternatives

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### 2.3.1 SUBSTATION SITE SELECTION

SCE has identified the Project Area (**Figure 2-1, Project Area**) as the area in which the substation must be located in order to optimize load balancing and distribution line lengths. Within the Project Area, SCE identified potential substation sites of at least 3 acres and evaluated each potential site applying a series of criteria, including, but not limited to:

- The proximity of each site to SCE's existing subtransmission line infrastructure
- Engineering constraints imposed by each site
- The location of each site relative to growth within the Electrical Needs Area
- Relative compatibility with existing nearby land uses
- Relative compatibility with city and county land uses
- Potential environmental constraints imposed by each site

Based on the criteria listed above, SCE identified three possible substation sites (**Figure 2-2, Alternative Project Sites**). As discussed below, SCE's analysis indicates that Site Alternative A is preferred to Site Alternative B and Site Alternative C.

## 2.4 Site Alternatives Evaluated in this PEA

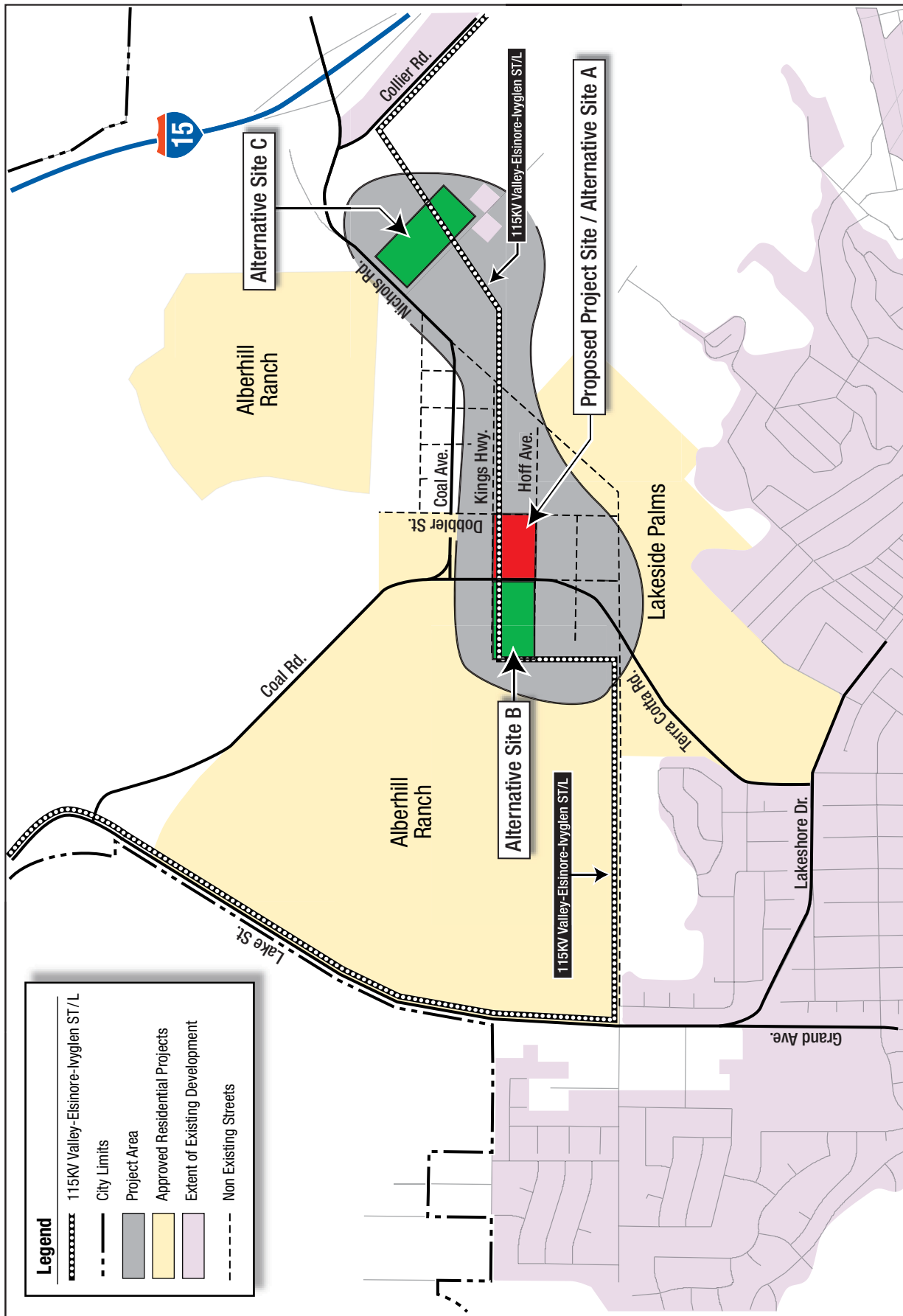
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### 2.4.1 SITE ALTERNATIVE A

Site Alternative A is a 6.6 acre parcel of land located east of Terra Cotta Road, west of Dobler Street, south of Kings Highway and north of Hoff Avenue. It is a rectangular shaped parcel of land in the City of Lake Elsinore currently owned by SCE. The property is zoned single-family residential by the City of Lake Elsinore. The existing Valley-Elsinore-Ivyglen 115 kV subtransmission line traverses this property along the north side.

### 2.4.2 SITE ALTERNATIVE B

Site Alternative B is a 5.7 acre parcel of land located directly west of Site Alternative A. It is a generally rectangular shaped parcel of land in the City of Lake Elsinore currently owned by SCE. Site Alternative B is located west of Terra Cotta Road, south of Kings Highway and north of Hoff Avenue. The property is zoned single-family residential by the City of Lake Elsinore. SCE's temporary Dryden 33/12 kV Substation is currently located on the northeast corner of this site. The existing Valley-Elsinore-Ivyglen 115 kV subtransmission line traverses this property along the north and west side.



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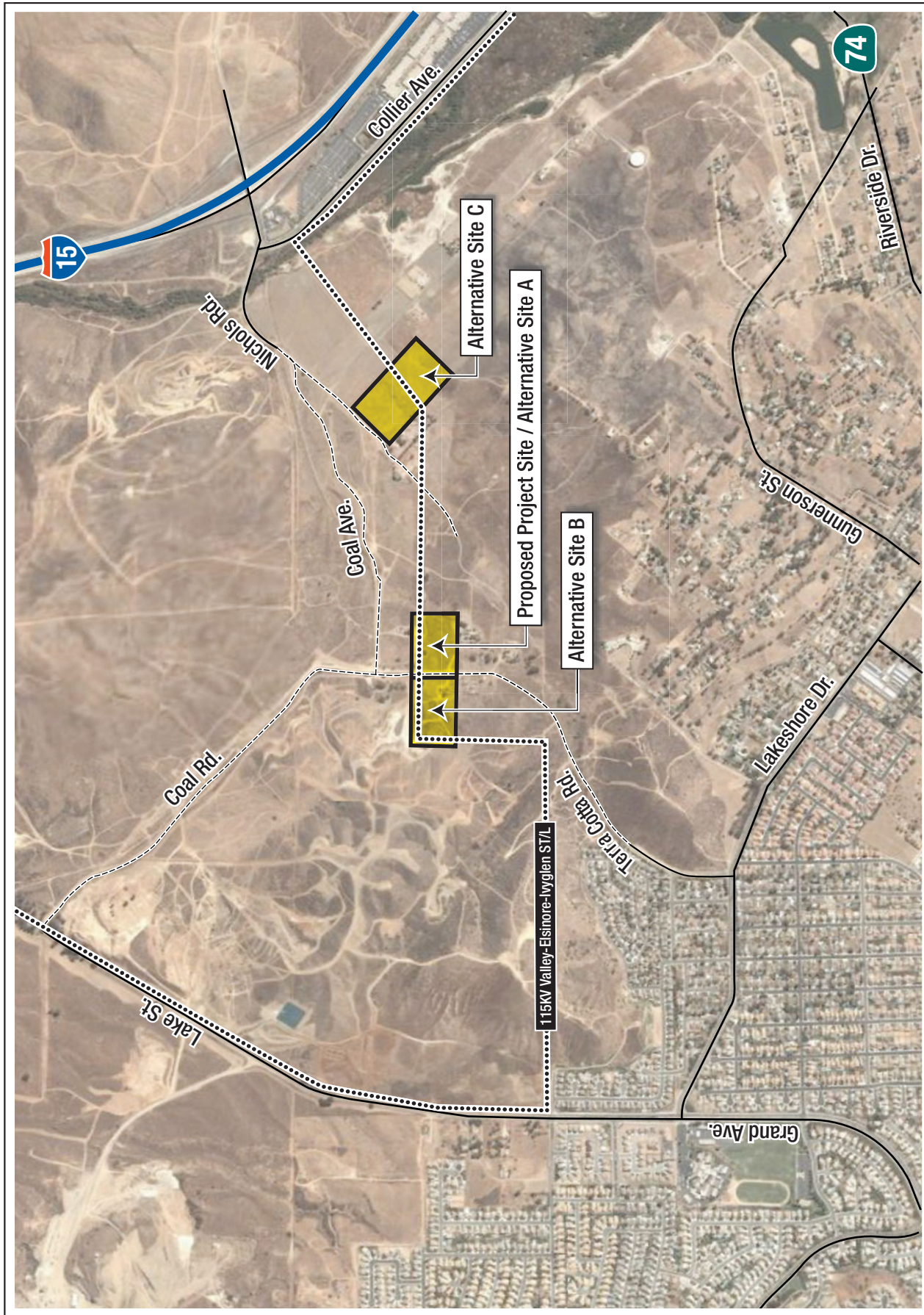


FOGARTY SUBSTATION – PROPONENT'S ENVIRONMENTAL ASSESSMENT

Project Area

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Revision date: March 1, 2007



FOGARTY SUBSTATION – PROPOSER'S ENVIRONMENTAL ASSESSMENT

## Alternative Project Sites



FIGURE 2-2

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### **2.4.3 SITE ALTERNATIVE C**

Site Alternative C is a 12.3 acre parcel of land located approximately 1,750 feet east of Site Alternative A. The overall site is rectangular in shape and oriented northwest to southeast along its longer axis. The northwesterly side of the site fronts for nearly 550 feet along Pierce Street. Street, and approximately 230 feet west of Baker Street located in the City of Lake Elsinore. The property is zoned as limited manufacturing by the City of Lake Elsinore, and is not owned by SCE. The existing Valley-Elsinore-Ivyglen 115 kV subtransmission line bisects this property in a northeasterly direction.

### **2.4.4 SITE ALTERNATIVES RECOMMENDATION**

Site Alternative A was determined to be the preferred alternative substation site. SCE currently owns both Site Alternative A and Site Alternative B. Site Alternative A and Site Alternative B are each preferable to Site Alternative C because of their proximity to the load to be served, and to the location of four existing distribution circuits that will be served by the new substation. Site Alternatives A and B are also preferable to Site Alternative C because Terra Cotta Road will be improved as a condition of approval of the Alberhill and Lakeside Palms communities providing access for circuits to exit the new substation. As compared to Site Alternatives A and B, Alternative C would require significant distribution line extension to the four existing circuits currently served by the Dryden 33/12 kV Substation on undeveloped roads. When the areas are developed the roads will likely be realigned and the lines would need to be relocated. Site Alternative C is located in close proximity to a blue line drainage southeast of the Site Alternative. This drainage could pose engineering and construction problems. Site Alternatives A and B are both compatible with surrounding land use designations, and pose the least engineering and environmental constraints to substation construction.

As compared to Site Alternative A, Site Alternative B would require significantly more grading and would require the construction of retaining walls. Site Alternative B would also require protection or removal of known cultural resources. The temporary Dryden 33/12 kV Substation would not prevent construction on Site Alternative B; however, it would pose greater constraints to substation construction than Site Alternative A.

## **2.5 Proposed Project**

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SCE recommends construction of System Alternative 1 with the substation facilities on site Alternative A (Fogarty Substation Project or Proposed Project).

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# 3: PROJECT DESCRIPTION

This chapter describes the construction, operation, and maintenance of the substation, the associated subtransmission and distribution lines, and the telecommunication system for the Proposed Project and each of the alternatives. A map of the location of the substation site for the Proposed Project is included on **Figure 3-1, Proposed Project Site**.

## 3.1 Proposed Fogarty Substation Facilities

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### 3.1.1 SUBSTATION DESCRIPTION

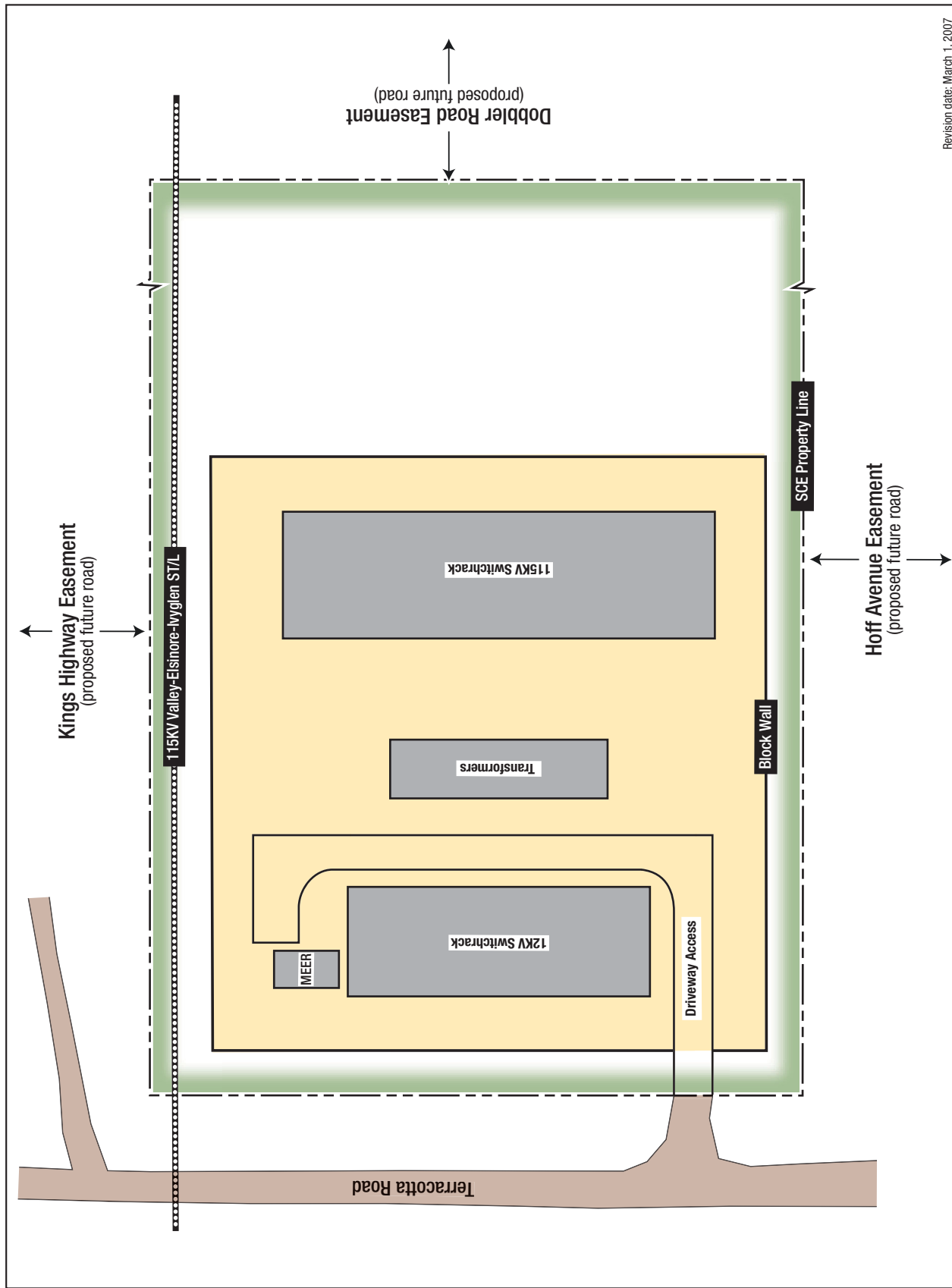
The substation would consist of electrical equipment needed to operate the substation, 12 kilovolt (kV) underground distribution circuits exiting the substation, 115 kV overhead subtransmission lines entering the substation, a perimeter wall surrounding the substation equipment with a gate to provide access in and out of the substation, and an access driveway to the substation from a public road. The substation would incorporate low-profile design features, which would limit the height of the electrical equipment to approximately 28 feet.

#### **Substation Equipment**

The substation would be an unmanned, automated, 56 megavolt-ampere (MVA), 115/12 kV low-profile substation containing a 115 kV switchrack, two 28 MVA 115/12 kV transformers, two 4.8 megavolt-ampere reactive (MVAR) 12 kV capacitor banks, and a 12 kV switchrack. The substation would be connected to two 115 kV subtransmission lines. Six underground 12 kV distribution circuits (four existing and two new) would be connected from the substation to Terra Cotta Road.

The 115 kV switchrack would be a low-profile design with an operating and transfer bus configuration with one line breaker and three sets of group operated disconnects. The bus-tie position would have one line breaker and one set of disconnects. The 12 kV switchrack would be a low-profile design with an operating bus, and a transfer bus. The design of the substation would also allow for a second operating bus, 10 additional 12 kV distribution lines, two additional 28 MVA transformers, two additional 115 kV subtransmission lines, one 115 kV 46.8 MVAR capacitor, and two additional 12 kV 4.8 MVAR capacitors.

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One prefabricated metal Mechanical-Electrical Equipment Room (MEER) measuring approximately 12 feet high, 36 feet long, and 20 feet wide would be erected to house control and relay racks, battery and battery chargers, AC and DC distribution switchboards and telecommunication equipment. The substation would be equipped with a substation automation system which includes one Human Machine Interface (HMI) rack and approximately twelve 19-inch equipment racks.

All equipment and structures at the substation would be electrically grounded in accordance with SCE and industry standards. Grounding calculations would be based on soil resistivity measurements.

Electrical equipment housed within the substation is summarized in **Table 3-1, Substation Facility Equipment Summary**.

<b>Table 3-1: Substation Facility Equipment Summary</b>	
<b>Equipment</b>	<b>Description</b>
115 kV Switchrack	<p>The proposed 115 kV low-profile steel switchrack would consist of six bays: two positions for lines, two positions for banks, one bus tie position, and a vacant position for a future 115 kV line. The two buses, operating and transfer, would each be 250 feet long and consist of 1590 thousand circular mils (kcmil) aluminum conductor steel reinforced (ACSR) conductor for each phase.</p> <p>Four of the switchrack positions would be equipped with a circuit breaker and three group-operated disconnect switches. The fifth position would be equipped with a circuit breaker and one group-operated disconnect switch. A control cable trench from the switchrack to the MEER would be installed. The switchrack dimensions would be approximately 28' H x 250' L x 94' W.</p>
Transformers	<p>Transformation would consist of two 28 MVA 115/12 kV transformers with isolating switch disconnects on high and low sides, surge arresters and neutral current transformers. The dimensions would be approximately 15' H x 80 L x 50 W. Two 115 kV low profile transformer bank racks would be constructed and equipped with one 28 MVA transformer each.</p>
12 kV Switchrack	<p>The 12 kV low-profile switchrack would consist of an 11 position rack expandable to 24 positions with wrap-around arrangement; 3-1/2 inch diameter extra heavy aluminum pipe to be utilized for the operating and transfer buses; a power cable trench; and a control cable trench to the MEER. The dimensions would be approximately 17' H x 99' L x 34' W.</p>
Capacitor Banks	<p>Two 12 kV, 4.8 MVAR capacitor banks would be installed. The dimensions would be approximately 17' H x 15.5' L x 13' W.</p>

**Table 3-1: Substation Facility Equipment Summary**

Equipment	Description
Mechanical-Electrical Equipment Room	A MEER would be constructed and contain control and relay panels, battery and battery charger, AC and DC distribution, HMI rack, communication equipment, telephone, and local alarm. Dimensions would be approximately 12' H x 36' L x 20' W. SCE typically purchases steel MEERs that have light tan/beige walls and roof, with a dark brown trim at the roofline, wall joints, and doorway. The MEER does not have eaves. Install a weather station to include temperature data that will provide information and collect weather data.

#### **Substation Lighting**

The substation would have access and maintenance lighting. The access light would be low-intensity and controlled by photo sensors. Maintenance lights would consist of high-pressure sodium lights located in the switchracks, around the transformer banks, and in areas of the substation where maintenance activity may take place. Maintenance lights would be used only when required for maintenance outages or emergency repairs occurring at night. Maintenance lights would be controlled by a manual switch and would normally be in the off position. The lights would be directed downward and shielded to reduce glare outside the facility.

#### **Substation Landscaping**

The substation site would not be landscaped immediately following construction. Instead, as the surrounding area develops, a plan for substation landscaping would be prepared and would be consistent with community and city standards to the extent that they are not inconsistent with SCE safety standards.

#### **Substation Perimeter Features**

To screen the substation from the public and to secure the facility, the substation would be enclosed on all four sides by a minimum 8 foot high perimeter wall and would be consistent with community standards and subject to SCE's safety requirements. The metal access gate would be approximately 20 feet wide and a minimum of 8 feet high. All perimeter walls and gates would be fitted with a band of at least three strands of barbed wire affixed near the top of the perimeter wall inside the substation for increased security. The barbed wire would not be visible from outside the perimeter wall. SCE would conform to setback requirements in the area.

#### **Site Access**

The substation would be accessed from the 90 foot wide right-of-way (ROW) from Terra Cotta Road by a 20 foot wide asphalt/concrete paved driveway. The substation entrance would have a locked gate (20 foot double drive) capable of accommodating two-way traffic access to the substation.

Trucks would use public streets to access the Fogarty Substation. Substation construction may precede the completion of paving and/or roadway widening improvements to Terra Cotta Road. If so, SCE would construct an improved temporary driveway access at the front of the substation within the ROW of Terra Cotta Road. The parallel east-west streets (Figure 3.1) located within the adjacent 80 foot wide ROWs for Kings Highway and Hoff Avenue, along the northern and southern sides of the substation, may or may not be constructed.

### 3.1.2 SUBSTATION CONSTRUCTION

This section discusses the substation construction plan for the Proposed Project. There are differences between each of the three alternative sites that would affect site preparation activities. These differences are summarized in this section below.

**Table 3-2, Substation Construction Personnel and Equipment Summary**, includes the approximate equipment, labor, and scheduling requirements for substation construction at the preferred site.

#### **Substation Site Preparation for Site Alternative A**

Site Alternative A is owned by SCE and consists of an approximate 6.6 acre parcel of vacant land having an easterly slope and an east-west oriented rectangular shape as measured from the center line of the ROW of the adjacent streets. Within the 6.6 acres is the substation footprint (area contained within the perimeter wall) that covers approximately 2.3 acres, 1.4 acres of easements and setbacks, and a 1.0 acre property segment extending east that would not be developed as part of the Proposed Project, and approximately 1.9 acres of future road ROWs surrounding the proposed substation site.

The prevailing topography of the site slopes easterly and would be altered by grading. Grading of the 2.3 acre area enclosed by project perimeter walls would be undertaken to achieve a two percent slope gradient to the east.

Prior to final design, a geotechnical investigation would be conducted to ascertain soil type and resistivity. 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 calculated as part of the final engineering and design. It is estimated that up to 50,000 cubic yards of imported fill would be required if the site is graded to a two percent slope. 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.

#### **Substation Site Preparation for Site Alternative B**

Site Alternative B is a 5.7 acre parcel of land and is located directly west of Site Alternative A. It is a generally rectangular shaped parcel of land in the City of Lake Elsinore currently owned by SCE. Site Alternative B is located west of Terra Cotta Road, south of Kings Highway and north of Hoff Avenue. Site preparation of Site Alternative B would require:

### 3: PROJECT DESCRIPTION

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- Excavation of the west and south slopes for approximately 60,000 cubic yards
- Terracing of the slopes (every 20 feet of vertical cut)
- Installation of retaining walls

#### **Substation Site Preparation for Site Alternative C**

Site Alternative C is a 12.3 acre parcel of land and is located approximately 1,750 feet east of Site Alternative A. The overall site is rectangular in shape and oriented northwest to southeast along its longer axis. The northwesterly side of the site fronts for nearly 550 feet along Pierce Street, and approximately 230 feet west of Baker Street located in the City of Lake Elsinore. Site preparation of Site Alternative C may require:

- Over-excavation, replacement and re-compaction of the soil (due to the impacts of higher water table)
- Avoidance of drainage

#### **Substation Facilities for Site Alternative A**

A temporary chain-link fence will be erected around the perimeter of the site. Construction of the foundations and below-ground facilities (e.g., ground-grid, conduit, and other infrastructure) would be completed, followed by installation of the above-ground structures and the electrical equipment, and construction of the perimeter wall. Equipment laydown areas for substation construction would be within the substation footprint.

The approximate construction equipment, personnel and scheduling for the substation construction is shown in Table 3-2.

Table 3-2: Substation Construction Personnel and Equipment Summary				
Construction Activity	Duration	Number of Personnel	Equipment <sup>1</sup>	Estimated Usage (Hours per Day)
Site Management	All	2	Office Trailer	8
Grading	20 days	10 Total	1 Water Trucks (Gasoline)	8
			1 Truck for Soil Test Inspector (Gasoline)	8
			1, 980 Loader (Diesel)	8
			1, Scraper (Diesel)	8
			1, Roller Compactor (Diesel)	(for 10 days)
Survey	10 days	2	2 Survey Trucks (Gasoline)	8



Table 3-2: Substation Construction Personnel and Equipment Summary

Construction Activity	Duration	Number of Personnel	Equipment <sup>1</sup>	Estimated Usage (Hours per Day)
Civil (foundations, underground conduit, ground grid, etc.)	60 days	10 Total	2 Crew Trucks (Gasoline/Diesel)	2
			2 Dump Trucks	2 - 4
			5-Ton Stake Bed Truck	2
			1, Portable Trencher	8 (for 30 days)
			1, Drill Rig	8 (for 10 days)
			Tractor/Skip Loader	6 - 8
			Forklift	4
Electrical (MEER, switchracks, conductor, circuit breakers, etc.)	60 days	15	2-(1 Ton) Stake Truck	4
			2 Crew Cab Trucks (Gasoline/Diesel)	6
			2 Carryall Vehicles (Gasoline)	6
			1 Boom/Crain Truck	4
			1 Tool Trailer	8
			1, Forklift	6
			2 Manlifts	8
Transformer Setup	14 days Per Unit	5	1, Carryall Vehicle (Gasoline)	2
			1, Crew Truck (Gasoline/Diesel)	2
			Crane	6
			Forklift	6
			Processing Trailer (Electric) And Trailer Generator 100kw	24 hours
			Low Bed Truck	4
Test (relays, energization, etc.)	80 days	2	Test Truck (Gasoline/Diesel)	4
Paving Contractor	5 days	8	Foreman Truck (Gasoline/Diesel)	6
			2 Dump Trucks (Gasoline/Diesel)	6
			2 Skip Loaders	6
			1 Barbergreen	8 (for 2 days)

Table 3-2: Substation Construction Personnel and Equipment Summary				
Construction Activity	Duration	Number of Personnel	Equipment <sup>1</sup>	Estimated Usage (Hours per Day)
Fence Contractor	7 days	4	1, Foreman Truck (Gasoline/Diesel)	4
			1, Crewcab (Gasoline/Diesel)	4
			1, Bobcat (Gasoline)	8
			1, 3-Ton Flatbed Truck	2 (for 2 days)
<sup>1</sup> Fuel for equipment is assumed to be diesel except where noted				

### **Substation Facilities for Site Alternative B**

The substation facilities that would be installed for Site Alternative B would be the same as those for Alternative A.

### **Substation Facilities for Site Alternative C**

The substation facilities that would be installed for Site Alternative C would be the same as those for Site Alternative A.

### **3.1.3 SUBSTATION OPERATION AND MAINTENANCE**

The proposed Fogarty Substation would be unmanned and the electrical equipment within the substation would be monitored and controlled remotely by a power management system from Valley Substation. Due to the remote operation of the substation, SCE personnel would generally visit for electrical switching and routine maintenance. Routine maintenance would include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for service continuity and preventive maintenance. SCE personnel would generally visit the substation approximately once per month.

The substation operation and maintenance would be the same whether the substation is located on Site Alternatives A, B, or C.

## **3.2 115 kV Subtransmission Line Description**

### **3.2.1 SUBTRANSMISSION LINE MODIFICATIONS**

The existing Valley-Elsinore-Ivyglen 115 kV subtransmission line would be the source line for the Fogarty Substation. This subtransmission line would be looped into the Fogarty Substation and out to the Valley-Elsinore-Valley-Ivyglen 115 kV subtransmission line. To accomplish this loop-in, two new overhead 115 kV line segments, approximately 200 feet each, would be constructed from the Valley-Elsinore-Ivyglen 115 kV subtransmission line to the Fogarty

Substation. As a result of the loop-in, two new 115 kV subtransmission lines would be formed; the Valley-Elsinore-Fogarty 115 kV subtransmission line and the Fogarty-Ivyglen 115 kV subtransmission line (**Figure 3-2, Subtransmission Line Arrangement for the Proposed Project**).

### **3.2.2 SUBTRANSMISSION LINE CONSTRUCTION**

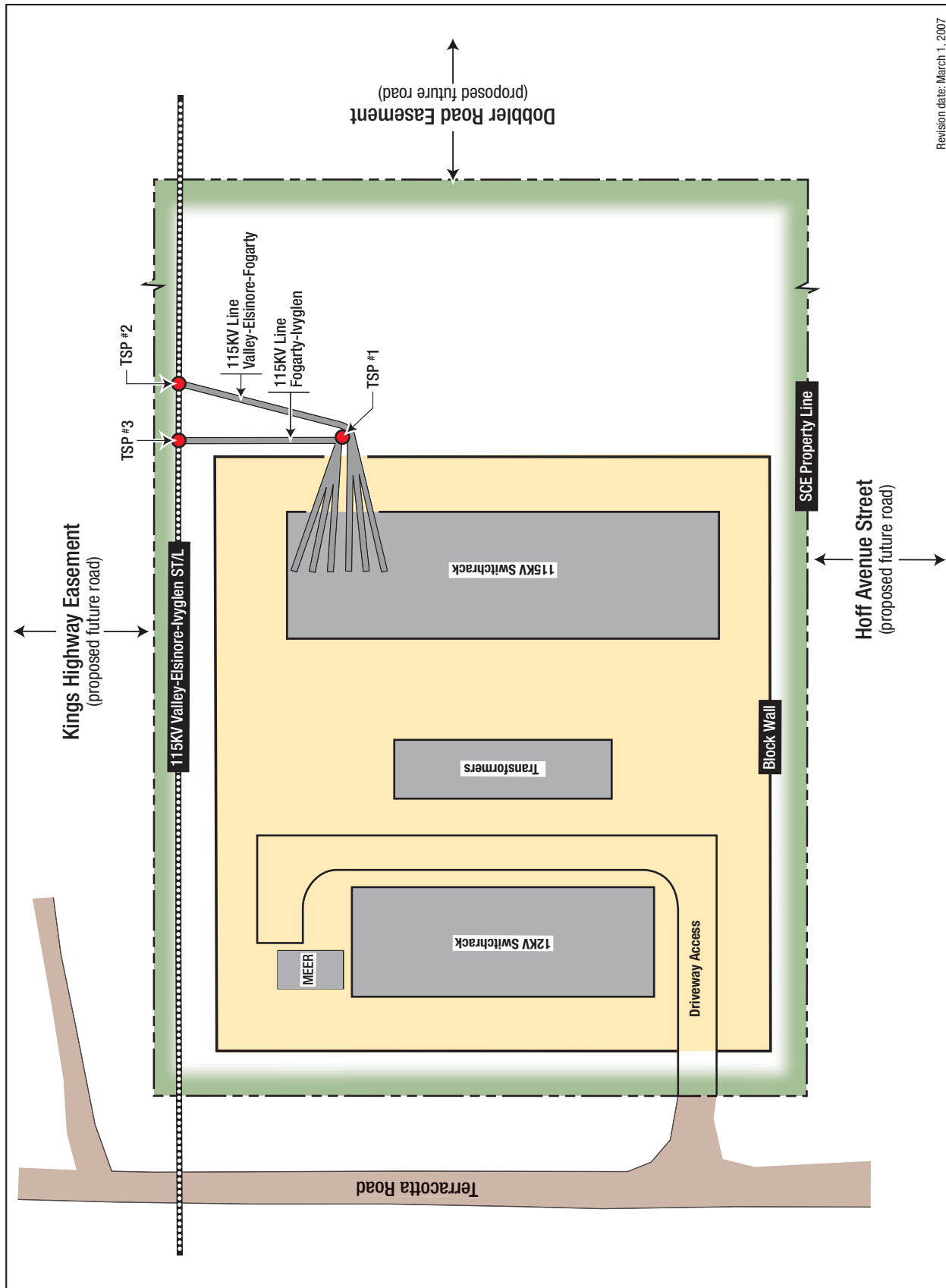
The following sections outline the construction activities for the overhead 115 kV subtransmission line modifications associated with the Proposed Project.

#### **Overhead Subtransmission Line Construction**

The positioning of the equipment for installing the overhead conductor segments from the existing Valley-Elsinore-Ivyglen 115 kV subtransmission line to the Fogarty Substation would be determined during construction. Equipment necessary for pole and conductor installations includes a heavy line truck, bucket truck, prefabrication truck, conductor pulling machines, and cable dollies. Equipment necessary for conductor pulling includes conductor-feeding equipment, conductor pulling equipment, crane, line truck, bucket truck, prefabrication truck, and related equipment.

The personnel, equipment, and construction schedule for the installation of the overhead subtransmission line segments is provided in **Table 3-3, Overhead Subtransmission Line Construction Personnel and Equipment Summary**.

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Revision date: March 1, 2007

Source: Southern California Edison, 2006



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## Subtransmission Line Arrangement for the Proposed Project

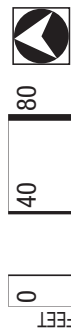


FIGURE 3-2

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Table 3-3: Overhead Subtransmission Line Construction Personnel and Equipment Summary

Construction Phase	Duration in Days	Number of Personnel	Equipment	Estimated Usage/Day (Hours)
Survey	1	3	1 Survey Truck (Gas or Diesel)	8
Footing Crew	4	8	1 Tractor/Trailer to haul Drill Rig (Diesel)	2
			1 Drill Rig (Diesel)	4-6
			4 Companion Vehicles (Gas/Diesel)	2
			1 Backhoe (Diesel)	4
			1 Water Truck (Diesel)	4
			1 Dirt Hauler (Diesel)	4
			3 Cement Trucks (Diesel)	1
Subtransmission Construction Crew	6	10	2 Companion Vehicles (Gasoline)	6
			1 Transmission Prefabrication Truck (Diesel)	2
			1 Transmission Line Truck (Diesel)	2
			2 Bucket Trucks (Diesel)	8
			1 Crane (Diesel)	8
			1 Wire dolly (Gas or Diesel)	4
			1 Wire Puller (Gas or Diesel)	4
			1 300Ton Crane (Diesel)	4-6
			1 Crane Companion Vehicle Flat-Bed (Diesel)	4-6
Environmental	6	3	1 Flat-Bed Tractor/Trailer (Diesel)	2
			3 Companion Vehicles (Gas)	8

Work would occur between the hours of 7:00 am to 7:00 pm on Monday through Saturday. The Fogarty Substation property would be used as a lay down area for equipment and materials for SCE crews as well as contract crews.

### 3.2.3 115 kV VALLEY-ELSNORE-IVYGLEN SUBTRANSMISSION LINE ACCESS DESCRIPTION

The existing 115 kV Valley-Elsinore-Ivyglen subtransmission line parallels Kings Highway and passes through the northern side of the Fogarty Substation. This line would be intercepted directly on-site by means of overhead lines supported by three new tubular steel poles (TSP)

with concrete footings. A TSP footing typically requires a borehole 4 to 6 feet in diameter and 20 to 40 feet deep. Reinforcing steel and mounting bolts would be positioned in the excavation and concrete would be placed around the structures to set the footing. After the footing has set, the TSP riser would be assembled on site, erected and bolted to the foundation.

The subtransmission line construction would be the same whether the substation is located on Site Alternatives A, B, or C.

#### **3.2.4 SUBTRANSMISSION LINE OPERATION AND MAINTENANCE**

SCE regularly inspects subtransmission lines and associated components. The inspections may lead to routine and preventative maintenance. There may also be emergency repair and maintenance performed for service continuity. No additional SCE personnel above normal staffing levels would be required to operate or maintain these subtransmission lines.

The subtransmission line operation and maintenance would be the same whether the substation is located on Site Alternatives A, B, or C.

### **3.3 Telecommunication System**

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The Proposed Project would require construction of diverse communication paths for the operating and monitoring of the substation and subtransmission line equipment. The paths would connect the Fogarty Substation to SCE's Valley, Ivyglen, and Elsinore substations. The telecommunications system provides the necessary 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 such as circuit breakers, transformers, and capacitors. The following sections describe the telecommunication improvements required for the Proposed Project.

#### **3.3.1 TELECOMMUNICATION IMPROVEMENTS**

Constructing the proposed telecommunications system improvements for the Proposed Project would require the installation of two 24-strand fiber optic cable segments between the Fogarty Substation and the existing fiber optic cable between Elsinore and Ivyglen substations. This would result in one communication path between Fogarty and Elsinore substations and a second communication path between Fogarty and Ivyglen substations. The fiber optic cable installation from Fogarty Substation would be underground to two separate wood poles, for 1,200 feet (see Appendix G – Telecommunications Fiber Optic Cable Line Route).

New telecommunications equipment would be installed at Fogarty Substation. An equipment rack installed in the Fogarty Substation MEER would hold telecommunications equipment for the substation. The MEER would contain conduits that connect to off-site fiber optic cables. Telecommunications equipment upgrades would occur at Valley, Ivyglen, and Elsinore substations to facilitate the new interconnections.

The telecommunication improvements would be the same whether the substation is located on Site Alternatives A, B, or C.



### 3.3.2 TELECOMMUNICATIONS CONSTRUCTION

The personnel, equipment and construction schedule for the telecommunication system improvements are listed in **Table 3-4, Telecommunication SONET (Synchronous Optical Network) Construction Equipment**.

<b>Table 3-4: Telecommunication SONET Construction Equipment</b>				
<b>Construction Phase</b>	<b>Duration In Days</b>	<b>Number of Personnel</b>	<b>Equipment<sup>1</sup></b>	<b>Estimated Usage/Day (Hrs)</b>
Communications Installation Crew	19	2	2 Vans (gasoline)	7
<sup>1</sup> Engines will not be running while vehicles are parked.				

#### **Underground Cable Construction**

The underground telecommunication cable would be installed in new underground trenches at the proposed Fogarty Substation.

At the proposed Fogarty Substation, a trench 18-inches wide, 36-inches deep, and approximately 1,200 feet long would be excavated with a backhoe. A 5-inch PVC conduit would be placed in the trench and covered with a layer of slurry, and paved. A vault would be installed at the beginning and the end of each section of trench. The personnel, equipment and construction schedule for the underground telecommunication system improvements are listed in **Table 3-5, Telecommunication Underground Construction Personnel and Equipment**.

Table 3-5: Telecommunication Underground Construction Personnel and Equipment				
Construction Phase	Duration In Days	Number of Personnel	Equipment <sup>1</sup>	Estimated Usage/Day (Hrs)
Trenching Crew	10	3	1 Flatbed truck	1
			1 Backhoe	8
			1 Stakebed truck	2
			1 Crew truck	2
			1 Bucket truck	8
Cable Installation Crew	3	4	1 Reel truck	8
			1 Reel truck	8
<sup>1</sup> Fuel for equipment is diesel except where noted.				

The telecommunication construction would be the same whether the substation is located on Site Alternatives A, B, or C.

### 3.3.3 TELECOMMUNICATION SYSTEM OPERATION AND MAINTENANCE

The telecommunications system would require periodic routine maintenance as well as emergency procedures for service continuity. Routine maintenance would include equipment testing, equipment monitoring, and repair.

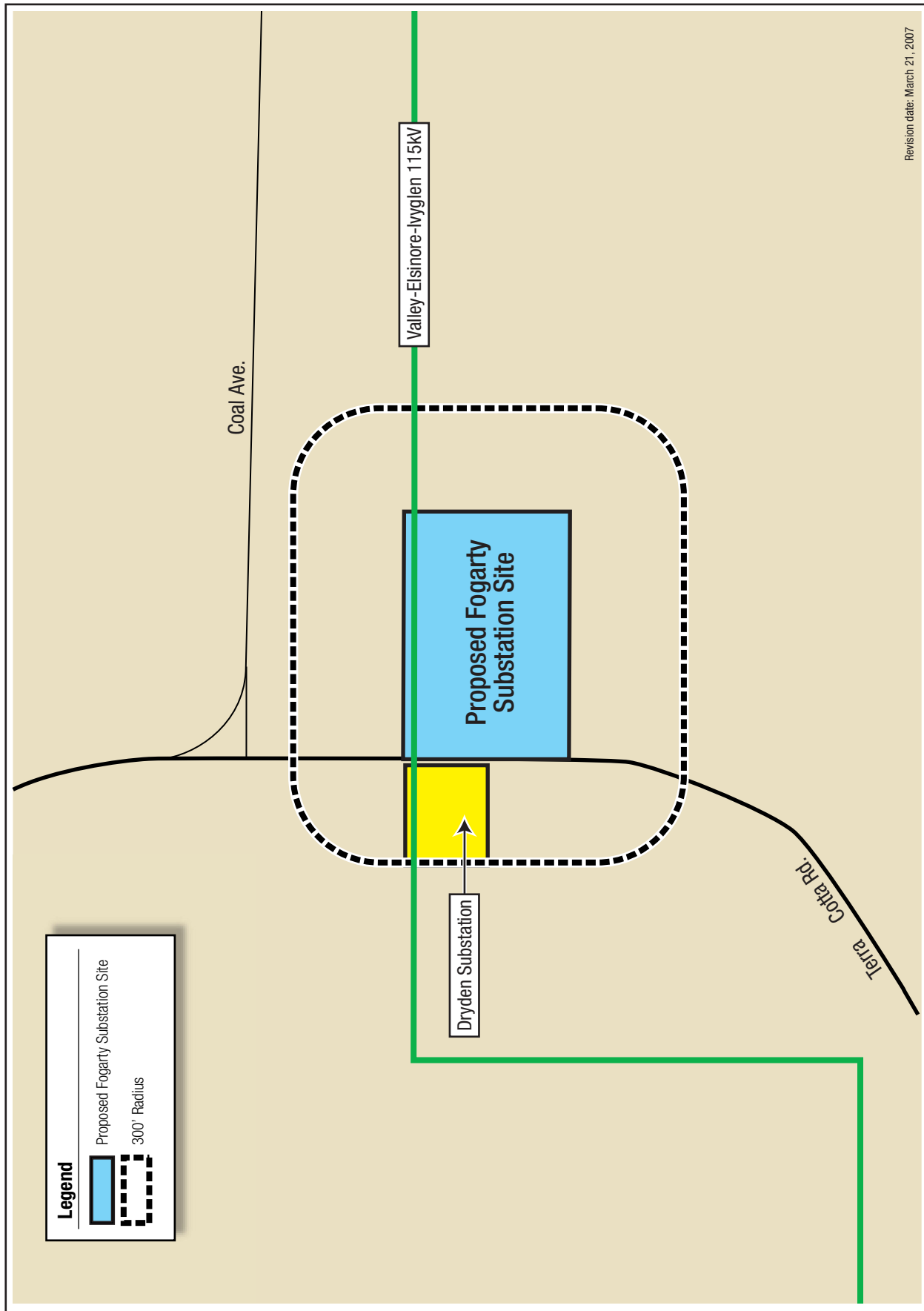
The operation and maintenance of the telecommunication system would be the same whether the substation is located on Site Alternatives A, B, or C.

## 3.4 Existing SCE Facilities

The Proposed Project would be constructed in an area with existing SCE facilities. The Valley-Elsinore-Ivyglen 115 kV subtransmission line, and the temporary Dryden 33/12 kV Substation are located within 300 feet of the Proposed Project. These existing facilities are shown on **Figure 3-3, Existing Substation and Subtransmission Line within 300 Feet of the Proposed Project**.

## 3.5 Project Schedule

Construction duration for the substation, subtransmission lines, and telecommunication upgrades is estimated to be up to 12 months. The Proposed Project is expected to be operational by mid-2009 to ensure that safe and reliable electric service is available to meet customer electrical demands without overloading the existing electric facilities in the Electrical Needs Area. Construction is scheduled to begin third quarter 2008.



Source: Southern California Edison, 2007



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## Existing Substation and Subtransmission Line within 300 Feet of the Proposed Project

FIGURE 3-3

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# 4: ENVIRONMENTAL IMPACT ASSESSMENT

## 4.0 Introduction

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This section examines the potential environmental impacts of the Proposed Project and alternatives. The analysis of each resource category begins with an examination of the existing physical setting (baseline conditions as determined pursuant to Section 15125(a) of the CEQA Guidelines) that may be affected by the Proposed Project. The effects of the Proposed Project are defined as changes to the environmental setting that are attributable to project construction and operation.

Significance criteria, as set forth in the CEQA Environmental Check List, are identified for each environmental issue area. The significance criteria serve as a benchmark for determining if a project would result in significant adverse environmental impacts when evaluated against the baseline. According to the CEQA Guidelines Section 15382, a significant effect on the environment means "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project...". If significant adverse impacts are identified, feasible mitigation measures are identified which could minimize the impacts to less than significant levels.

CEQA Guidelines Section 15126.4 (a)(3) states that mitigation measures are not required for effects which are not found to be significant. Therefore, where an impact is less than significant, no mitigation measures have been proposed. In addition, compliance with laws, regulations, ordinances, and standards designed to reduce impacts to less than significant levels are not considered mitigation measures under CEQA.

SCE, as the project applicant, also includes proposed measures for impacts that are less than significant, which are not mitigation measures under CEQA, but that would augment the Proposed Project. These are called Applicant Proposed Measures.

Applicant Proposed Measures and Mitigation Measures are summarized in Appendix H.

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## 4.1 Aesthetics

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Visual resources of a public view-shed area are comprised of both natural landscape features and man-made features (i.e., the built environment). Specific visual resource elements comprising a view-shed may include natural landforms, native vegetation, water bodies or streams, and features of the built environment. Various combinations of such landscape features form the overall visual character of an area. The existing visual character of the landscape is studied and photographically documented to provide the baseline of existing visual conditions against which to assess whether elements introduced by a given project would be compatible and harmonious with the existing visual conditions, or whether they could be found to be unfavorable or discordant within the existing visual setting.

### Viewer Sensitivity

Viewer sensitivity is a measure of public concern for changes to scenic quality and is one threshold for evaluating visual impact significance. Viewer activity, view duration, distance away from seen objects (foreground, middleground, background), adjacent land uses, and special planning designations, such as scenic route designation, are used to characterize viewer sensitivity.

#### 4.1.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The site proposed for the Fogarty Substation is currently vacant and is situated in a rural area of the northwestern part of the City of Lake Elsinore that contains dispersed single-family residences and associated unoccupied non-residential structures. The Proposed Project would be located adjacent to Alberhill Ranch and Lakeside Palms residential developments in the City of Lake Elsinore. The immediate vicinity of the Proposed Project Site is identified by a neighborhood/community place named "Terra Cotta" on the USGS, Lake Elsinore, California 7.5-minute topographic map quadrangle. The Proposed Project Site is situated in Terra Cotta on broad-floored alluvium-filled valley that is flanked to the north, west, and southeast by a local hill top features visible from the site that crest at elevations of 1,741 feet, 1,660 feet, and 1,560 feet above mean sea level, respectively. A spot elevation near the center of the Proposed Project Site places its elevation at approximately 1,330 feet. The surface of the Proposed Project Site exhibits a gentle slope gradient toward the east. The prevailing natural vegetation of the hillsides and adjacent valley slopes consists of mixtures of xerophytic scrub (generally on the steeper slopes) and annual grassland (on gentler slopes) that turn from muted, dull and light greens to browns and yellows between early spring and late summer.

The Proposed Project Site is accessible from the north, south, and northeast by means of lightly traveled dirt roads. As such the Fogarty Substation site occupies a relatively "remote-of-access" location that would only be seen by comparatively few passing motorists. Access from the north and south to the site is possible via Terra Cotta Road, a road that consists of an improved dirt surface where it bypasses the site. The Nichols Road exit of the I-15 Freeway that provides access via a series of unpaved roads from the northeast (i.e., Nichols Road and Coal Avenue) to the site, is located a little over one mile to the northeast.

#### **Project Site Viewing Locations**

The existing visual conditions of the Proposed Project Site and its surroundings are illustrated by three photographic panoramas from key viewpoints located east, west, and southwest of the site (**Figures 4.1-1, Existing Condition Visual Plate – View 1, 4.1-2 Existing Condition Visual Plate – View 2, and 4.1-3 Existing Condition Visual Plate – View 3**). The three viewpoints were selected because they clearly show the nature and extent of existing visual conditions of the Proposed Project site and also adequately represent the prevailing visual characteristics of the vicinity in which the Fogarty Substation, tubular steel poles (TSP), and subtransmission and telecommunication lines would be situated.

The I-15 Freeway is a route identified as eligible for a State of California Scenic Highway designation. Candidate routes are typically listed for further study for adoption as scenic routes because they may offer foreground, middle-distance, and distance views of landscapes that possess scenic qualities. As indicated above, the Proposed Project Site is located approximately one mile from the I-15 Freeway, and with its low-lying valley elevation relative the surrounding hill terrain, it is not distinguishable in fleeting westerly views from the freeway.

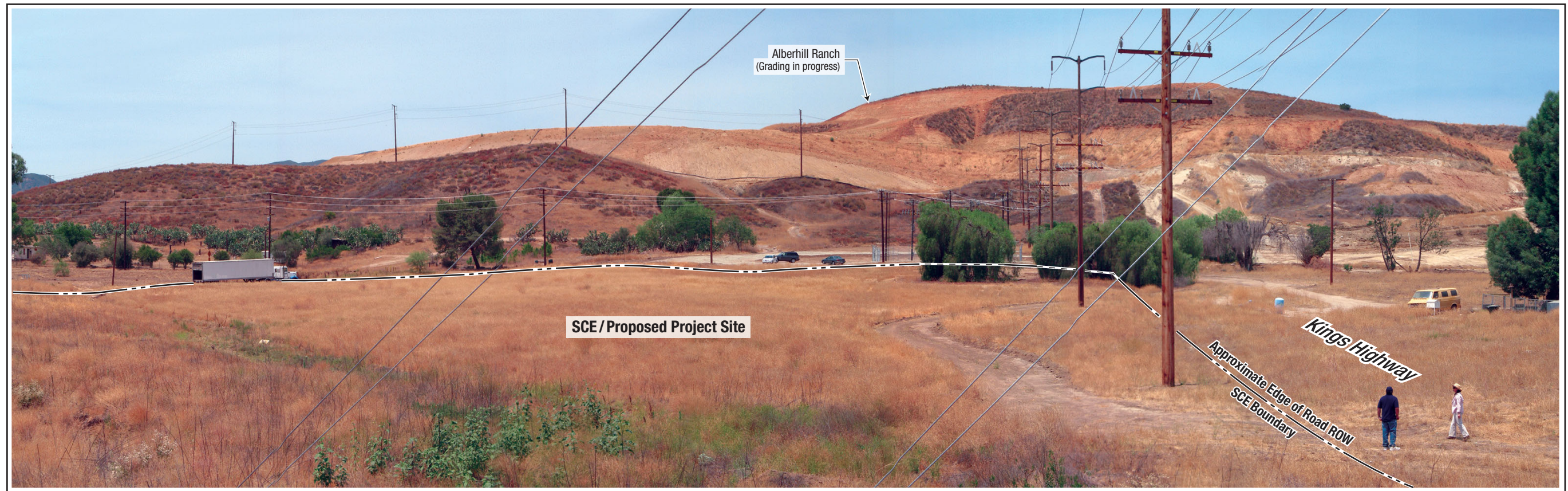
Pursuant to Exhibit VII-I of the City of Lake Elsinore's General Plan, Lakeshore Drive is identified as a local scenic corridor. Scenic areas identified for the Lakeshore Drive corridor include Lake Elsinore and the Santa Ana Mountains both of which are situated south of the Proposed Project Site. The Proposed Project Site is situated approximately 3,400 feet northeasterly of Lakeshore Drive and intervening development and distance eliminates potential visibility of the Proposed Project Site.

The following section identifies where potentially affected views occur and provides a description of the character of the views. Based on existing land uses, these views occur primarily along Terra Cotta Road (existing dirt road) immediately west of the Proposed Project Site, and from a slightly elevated location near the ROW for Dolbeer Street, an undeveloped street that abuts the eastern side of the 6.6 acre SCE owned Proposed Project Site. Currently, there are no developed public streets, other than Terra Cotta Road, from which the public would view the Proposed Project site. No scenic roadways or highways are located within the Proposed Project Site.

#### **View 1**

The photographic panorama depicted in Figure 4.1-1 is an existing condition view of the Proposed Project Site taken from a location slightly east of the northeast corner of the site at its western end. The Proposed Project Site is vacant and devoid of distinguishing natural or man-made features. The existing 115 kV Valley-Elsinore-Ivyglen subtransmission line, that passes by the northern side of the site can be seen in the right side of the photograph. The 80 foot wide ROW for Kings Highway (which is undeveloped) lies to the right of the 115 kV subtransmission line ROW in the photograph. The Proposed Project Site is located on the left side of the transmission line ROW and occupies the central portion of the view. The location of Terra Cotta Road, along the western side of the site, is marked in the photograph by several parked cars. The parked truck at the left of the photograph marks the approximate southeast corner of the site. The western view-shed limit depicted in the photograph consists of a 1,660

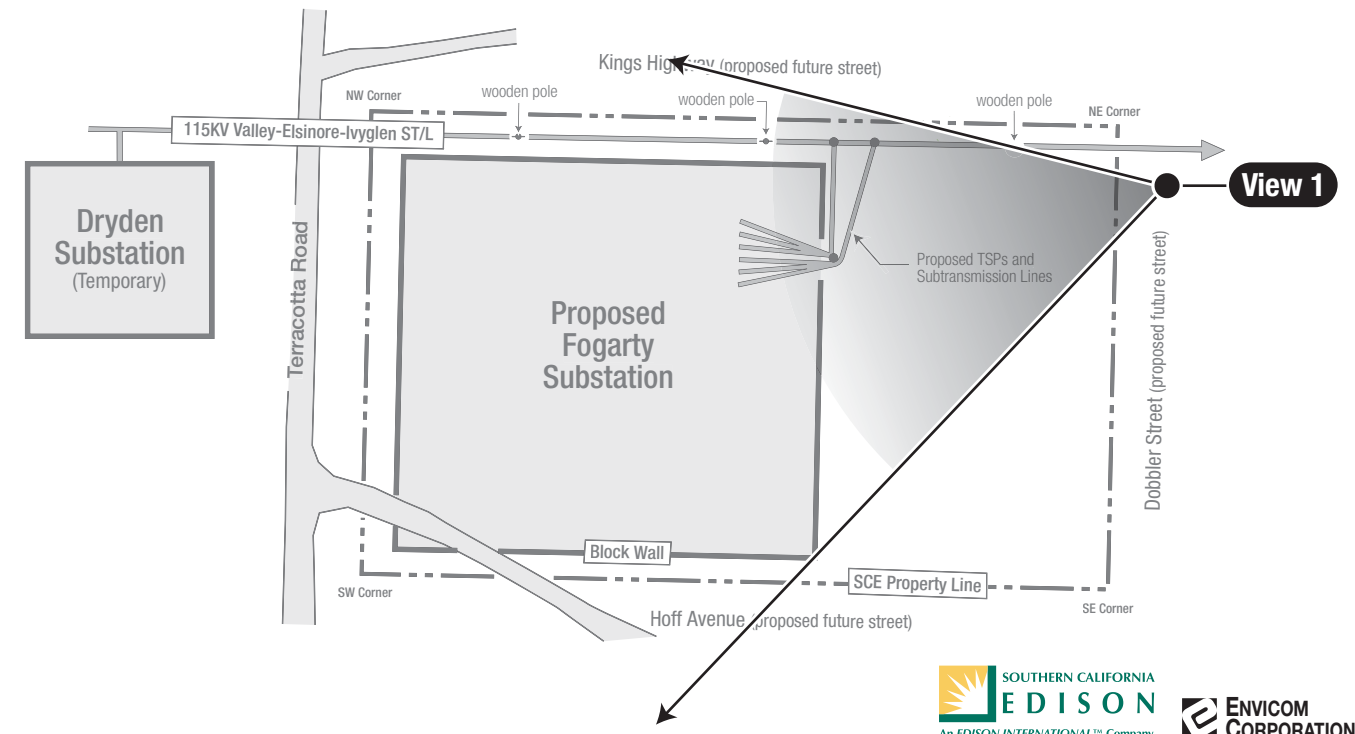




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## View 1

The photographic panorama depicted is an existing condition view of the Proposed Project Site taken from a location slightly east of the northeast corner of the site at its western end. The Proposed Project Site is vacant and devoid of distinguishing natural or man-made features. The existing 115 kV Valley-Elsinore-Ivyglen subtransmission line, supported by wooden poles, that passes by the northern side of the site can be seen in the right side of the photograph. The 80 foot wide ROW for Kings Highway (which is undeveloped) lies to the right of the 115 kV subtransmission line ROW in the photograph. The Proposed Project Site is located on the left side of the transmission line ROW and occupies the central portion of the view. The location of Terra Cotta Road, along the western side of the site, is marked in the photograph by several parked cars. The parked truck at the left of the photograph marks the approximate southeast corner of the site. The western view-shed limit depicted in the photograph consists of a 1,660 foot high ridge in the hill terrain of the Alberhill Ranch. The ridge and adjacent terrain is undergoing mass grading for residential lots and associated infrastructure. The surface of the Proposed Project Site slopes slightly toward the viewer. The slightly elevated viewpoint shows the site to be devoid of distinguishing natural terrain or man-made features. The Proposed Project Site is covered with annual grassland and an introduced (non-native) pepper tree.



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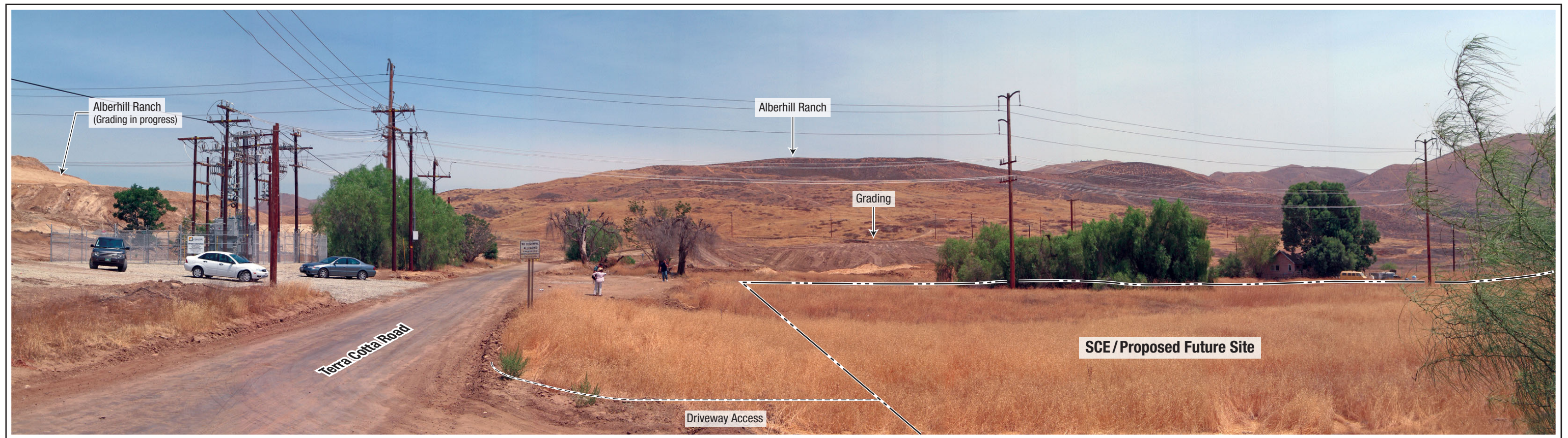


FIGURE 4.1-1

## Existing Condition Visual Plate – View 1

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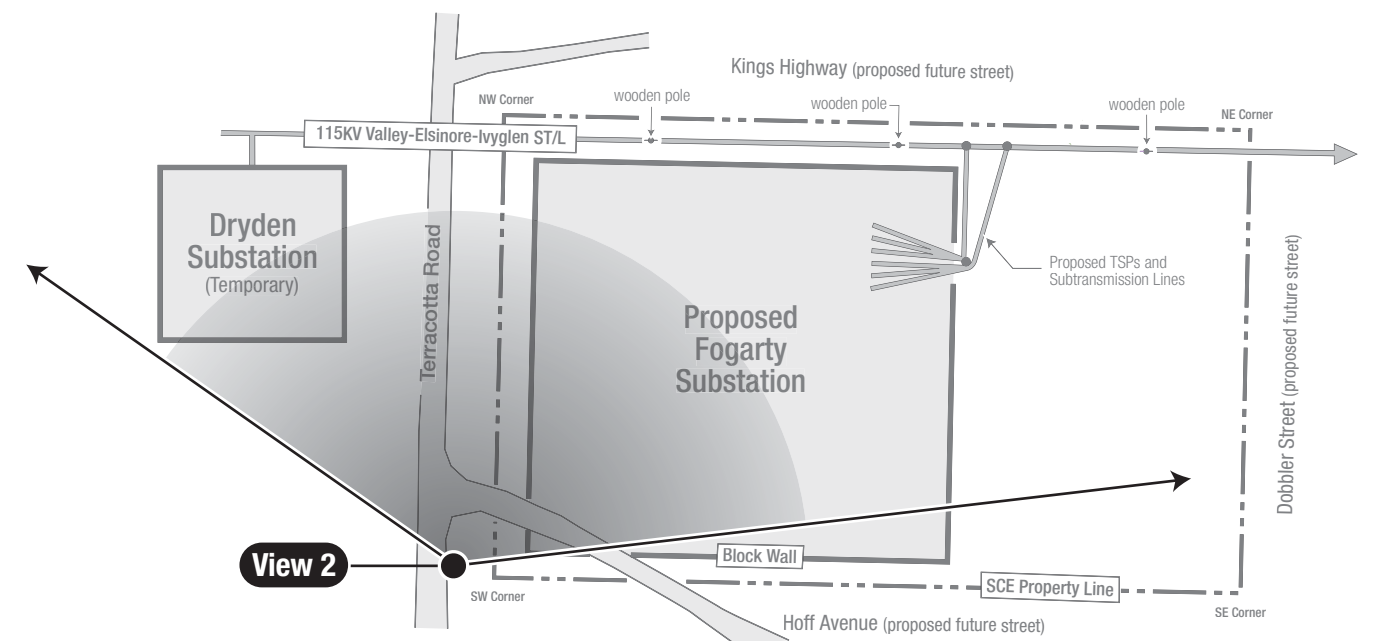




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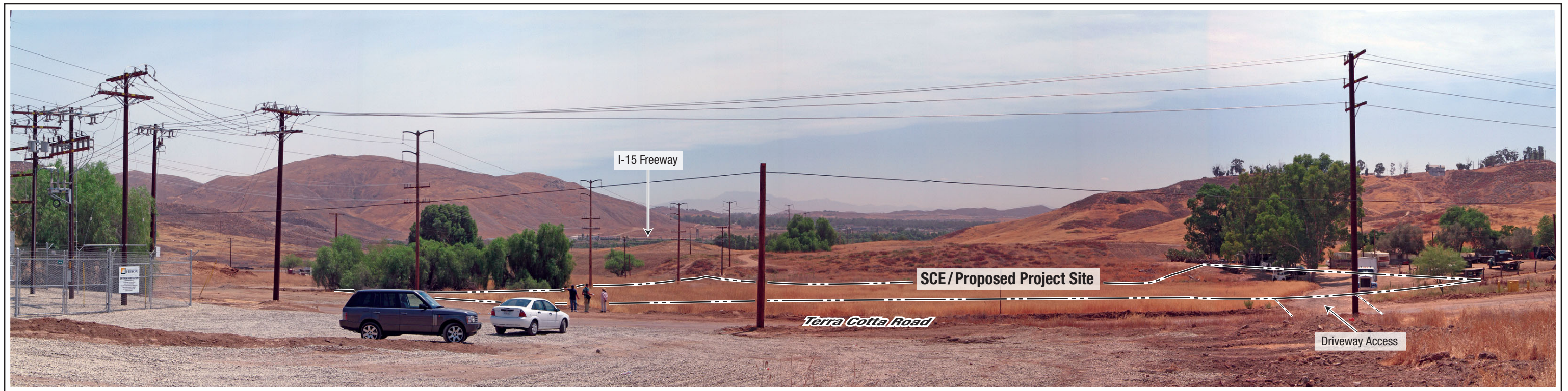
## View 2

The photographic panorama depicted illustrates a northerly view of the Proposed Project Site from the access driveway to the southwest corner of the 2.3 acre substation footprint that is to be enclosed within an 8 foot high wall. The view shows the featureless nature of the surface of the Proposed Project Site where it abuts the eastern side of Terra Cotta Road. The 115 kV Valley-Elsinore-Ivyglen transmission line, supported by wooden poles, can be seen extending east and west across the middle of the photograph. Also visible is the Dryden Substation, erected west of Terra Cotta Road to temporarily serve the growing electricity demand of the vicinity until the Fogarty Substation Project is completed. To the right of the pepper trees bordering the 115 kV transmission line, a single-family residence can be seen north of the undeveloped ROW of Kings Highway. The residence is situated among ornamental trees, including a large pine tree. The northern skyline viewshed limit is comprised of a 1,741 foot high local ridgecrest on the Alberhill Ranch that is slated for residential development. Grading for the roadway infrastructure of the Alberhill Ranch development can be seen in the middle-distance beyond the pepper trees.





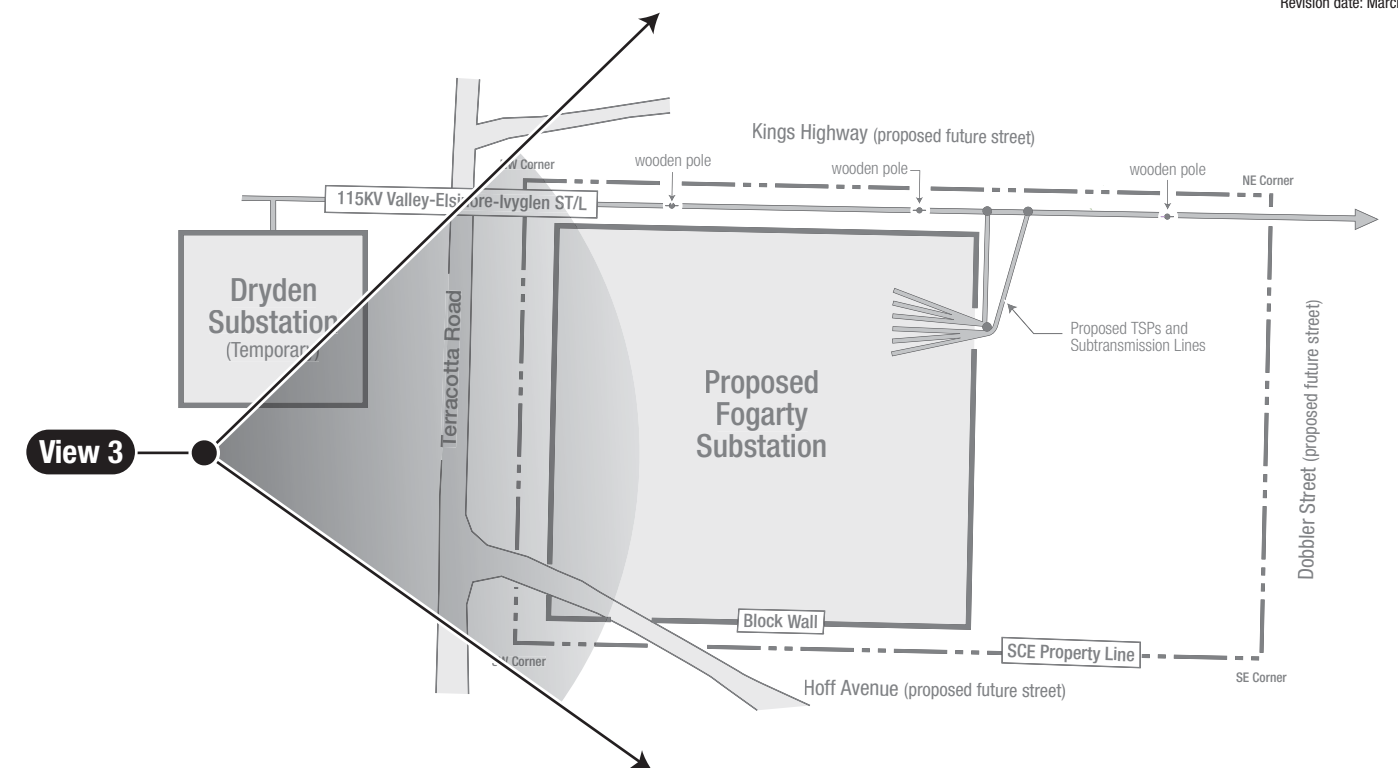
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### View 3

The photographic panorama depicted illustrates an easterly view of the Proposed Project Site from a location adjacent to the temporary Dryden Substation to the west of Terra Cotta Road. The 115 kV Valley-Elsinore-Ivyglen transmission line, supported by wooden poles, can be seen extending east and west into the distance from the left side of the photograph. A single-family residential structure, a house trailer, and a number of parked trucks can be seen on the property adjacent to the south side of the ROW for Hoff Avenue, a proposed future street that fronts along the southern boundary of the Proposed Project Site. The viewshed limit formed by the tree-lined ridge in the right side of the photograph rises to an elevation of 1,560 feet.



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foot high ridge in the hill terrain of the Alberhill Ranch. The ridge and adjacent terrain is undergoing mass grading for residential lots and associated infrastructure. The surface of the Proposed Project Site slopes slightly toward the viewer. The slightly elevated viewpoint shows the site to be devoid of distinguishing natural terrain or man-made features. The Proposed Project Site is covered with annual grassland and an introduced (non-native) pepper tree.

### **View 2**

The photographic panorama depicted in Figure 4.1-2 illustrates a northerly view of the Proposed Project Site from the access driveway to the southwest corner of the 2.3 acre substation footprint that is to be enclosed within an 8 foot high wall. The view shows the featureless nature of the surface of the Proposed Project Site where it abuts the eastern side of Terra Cotta Road. The 115 kV Valley-Elsinore-Ivyglen transmission line, supported by wooden poles, can be seen extending east and west across the middle of the photograph. Also visible is the Dryden Substation, erected west of Terra Cotta Road to temporarily serve the growing electricity demand of the vicinity until the Fogarty Substation Project is completed. To the right of the pepper trees bordering the 115 kV transmission line, a single-family residence can be seen north of the undeveloped ROW of Kings Highway. The residence is situated among ornamental trees, including a large pine tree. The northern skyline viewshed limit is comprised of a 1,741 foot high local ridgecrest on the Alberhill Ranch that is slated for residential development. Grading for the roadway infrastructure of the Alberhill Ranch development can be seen in the middle-distance beyond the pepper trees.

### **View 3**

The photographic panorama depicted in Figure 4.1-3 illustrates an easterly view of the Proposed Project Site from a location adjacent to the temporary Dryden Substation to the west of Terra Cotta Road. The 115 kV Valley-Elsinore-Ivyglen transmission line, supported by wooden poles, can be seen extending east and west into the distance from the left side of the photograph. A single-family residential structure, a house trailer, and a number of parked trucks can be seen on the property adjacent to the south side of the ROW for Hoff Avenue, a proposed future street that fronts along the southern boundary of the Proposed Project Site. The viewshed limit formed by the tree-lined ridge in the right side of the photograph rises to an elevation of 1,560 feet. The vicinity of the Nichols Road on- and off-ramps on I-15 Freeway is located approximately one mile to the northeast of the site.

As shown by the three views depicted in Figures 4.1-1 to 4.1-3, the Proposed Project Site is essentially featureless in that it is nearly level and lacks unique geological features or rock outcrops, native scrub or trees, water features, and/or cultural landscape features that would be considered as being visually sensitive and that would confer a significant level of scenic sensitivity to the site. The vegetation tones and textures of the disturbed annual grassland of the site are commonplace in the immediate surroundings of the Proposed Project Site and do little to distinguish the visual character of the site from its surroundings. The most prominent visual features near the Proposed Project Site include introduced exotic pepper trees and pine trees, tall wood-pole-supported electricity transmission lines, and the Dryden Substation. Two single-family residences are also found in close proximity to the site. One residence, accessible from Coal Avenue (a local dirt road) is located immediately north of the Proposed Project Site

### 4.1 Aesthetics

and the 80 foot wide ROW for Kings Highway and another is located immediately to the south. Both residences are largely shielded from the Proposed Project Site by intervening rows of pepper, pine, and/or eucalyptus trees.

#### 4.1.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

##### **Federal**

There are no Federal regulations regarding aesthetics and visual resources related to the Proposed Project.

##### **State**

Other than CEQA, there are no State regulations regarding aesthetic resources related to the Proposed Project or affecting the Project Area. The I-15 Freeway is eligible to be designated as a State Scenic Highway within the Project Area, but it has not been designated as such.

##### **Regional and Local**

While SCE intends to develop facility designs that are compatible with local zoning, the Proposed Project is exempt from local land use and zoning regulations and permitting.

##### **City of Lake Elsinore**

The City of Lake Elsinore, in Chapter 17.04 of its Zoning Code addresses the use of a “Scenic Overlay District” designation, which (Section 17.04.010) “...is intended for use in areas of high scenic value to preserve and enhance these values and to assure the exclusion of incompatible uses.” The Proposed Project site is not located within a Scenic Overlay District.

Exhibit VII-I of the City of Lake Elsinore’s General Plan identifies Lakeshore Drive as a local a scenic corridor. Scenic areas identified for the Lakeshore Drive corridor include Lake Elsinore and the Santa Ana Mountains, both of which are situated south of the Proposed Project site and in view-sheds that do not contain the Proposed Project site. The Proposed Project site is situated approximately 3,400 feet northeasterly of Lakeshore Drive and intervening residential and commercial development in the City and the distance involved eliminate potential visibility of the site.

#### 4.1.3 SIGNIFICANCE CRITERIA

The significance criteria for assessing the impacts to aesthetics come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings



- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

#### 4.1.4 IMPACT ANALYSIS

The 6.6 acre property on which the Fogarty Substation site would be located fronts for 442.5 feet along the eastern side of Terra Cotta Road (an existing improved dirt road to the west) and situated between the 80 foot ROWs for Kings Highway and Hoff Avenue (both undeveloped “paper streets”) to the north and south of the site, respectively. The Fogarty Substation’s footprint (area contained within the perimeter wall) would cover approximately 2.3 acres of the larger parcel. The substation walls would be set back 20 feet from Terra Cotta Road and Hoff Avenue and approximately 34 feet from Kings Highway. Immediately east of the walled substation a 58 foot wide easement would be situated to accommodate the location of three TSPs that would convey the Fogarty-Ivyglen and Elsinore-Fogarty 115 kV subtransmission lines from the Valley-Elsinore-Ivyglen subtransmission line ROW to the station. The three TSPs would be located outside of the northeast corner of the perimeter wall approximately 50 feet east of an existing wood pole that supports the existing Valley-Elsinore-Ivyglen subtransmission line. The TSPs would be approximately 9 feet taller than the existing wooden poles and arranged in a triangular pattern. Two of the TSPs would be placed in line with the subtransmission line approximately 30 feet apart and the third would be placed 76 feet to the south within the 58-foot wide easement bordering the eastern side of the perimeter wall. The TSPs would have a flat grey metallic coloring that would appear lighter in tone than the existing dark creosote-treated wood poles when viewed in reflected light. When backlit the wood and steel poles would not appear as different in coloration. A 1.0 acre portion of the property extending to the east of the substation would not be developed for substation purposes and would remain vacant.

To aid in the visual impact assessment of the proposed Fogarty Substation Project photographic simulations were prepared by means of digital computer technology. Engineering data representing the design of the proposed low-profile electrical transformer facility was used to construct detailed three-dimensional computer models of the substation, TSPs and other Project components from the perspectives of the three viewpoint locations shown in **Figure 4.1-4 Simulated View Locations**. This approach provides realistic post-project depictions of the way the Proposed Project would appear once constructed. The three locations were selected along Terra Cotta Road as it is the only existing public road from which foreground views of the site are available to motorists and passers-by.

The simulations depict a northeasterly site view, (**Figure 4.1-5 Simulated Views of the Proposed Project – View 1**), easterly view, (**Figure 4.1-6 Simulated Views of the Proposed Project – View 2**), and southeasterly view, (**Figure 4.1-7 Simulated Views of the Proposed Project – View 3**). These figures allow a comparison between existing pre-project visual conditions and those that would prevail after the Proposed Project has been completed.

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Source: VisionScape Imagery, August 2006

Revision date: February 14, 2007

FOGARTY SUBSTATION – PROPONENT’S ENVIRONMENTAL ASSESSMENT



## Simulated View Locations

No Scale



FIGURE 4.1-4

Proponent’s Environmental Assessment  
Fogarty 115 kV Substation Project

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Source: VisionScape Imagery, August 2006

Revision date: February 14, 2007

## Simulated Views of Proposed Project – View 1

FIGURE 4.1-5

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Source: VisionScape Imagery, August 2006

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Simulated Views of Proposed Project – View 2

FIGURE 4.1-6

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Source: VisionScape Imagery, August 2006

Revision date: February 14, 2007

## Simulated Views of Proposed Project – View 3

FIGURE 4.1-7

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**4.1.4.1 Construction Impacts****Would the project have a substantial adverse effect on a scenic vista?**

Construction of the Proposed Project would not have a substantial impact on a scenic vista. The Proposed Project is situated on a broad valley floor at an elevation of approximately 1,300 feet. Viewshed-defining ridgelines to the north, west, and southeast reach elevations of 1,600 feet, 1,560 feet, and 1,741 feet, respectively. Construction activities on the floor of the valley at the Proposed Project site would not be seen in distant views (of approximately one mile) from the I-15 Freeway. Distant views of the above ridgelines as seen from the I-15 Freeway would also not be interfered with by any construction activity undertaken on the Proposed Project site.

The City of Elsinore's zoning maps for the Fogarty Substation site location and its immediate surroundings do not designate the area as falling within a Scenic Overlay District. Therefore, zoning policies and provisions specifically designed to address community-identified scenic resources that pertain to Scenic Overlay District areas do not apply. Construction of the Proposed Project would result in no impact to a scenic vista.

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

Construction of the Proposed Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The Proposed Project Site is devoid of distinguishing natural or man-made visual elements that would be considered scenic. Site clearing, grading and construction of permanent facilities at the Proposed Project site would not substantially impact on-site visual resources, as none of the distinguishing surface characteristics of the site are considered to be scenic. Further, the Proposed Project Site's low valley floor location relative to the surrounding hill terrain effectively places its surface out of view from the I-15 Freeway, a State "eligible" Scenic Highway<sup>1</sup>. The Proposed Project site is also located approximately 3,400 feet northeast of Lakeshore Drive, a City of Lake Elsinore designated Scenic Corridor. However, intervening development and distance eliminates potential views of the Project Site from this route. Therefore, construction of the Proposed Project would result in no impact to scenic resources.

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

Construction of the Proposed Project would not degrade the existing visual character of the site or its surroundings. The existing surface terrain and vegetation conditions of the site have a commonplace appearance in the immediate vicinity of the Project Site. The single-family

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<sup>1</sup> The I-15 Freeway, located approximately one mile to the northeast of the Proposed Project Site is classified as an "eligible" State Scenic Highway. Meaning that it may be a candidate for "official designation" in the future, but it is not currently designated as a State Scenic Highway.



## 4: ENVIRONMENTAL IMPACT ASSESSMENT

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### 4.1 Aesthetics

residential structures immediately north and south of the Project Site are abandoned and the yard area of the one to the south of Hoff Street is distinguished by visual clutter in the form of open air storage of miscellaneous mechanical equipment, makeshift sheds, and parked trailers.

Construction activity would temporarily bring in construction trucks, cranes, site grading, and TSP and line installation equipment during different Project construction phases. As grading is in progress and on-going for the infrastructure and site development west and north of the Proposed Project Site, views of construction equipment at work in the immediate proximity of the Proposed Project site are not uncommon. As the visual qualities of the Proposed Project site are unremarkable and not considered scenic the site clearing, surface grading and facilities construction activities associated with the Proposed Project would not degrade the existing visual character of the site and its surroundings. Further, the surfaces of the Proposed Project site and its immediate surroundings generally lie beyond the range of view and/or have visibility of them obstructed by intervening landscape features and undulating terrain. Construction of the Proposed Project would result in less than significant impacts to the existing visual character or quality of the site and its surroundings.

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

Construction of the Proposed Project would not introduce significant sources of light or glare into the area. Construction activities would not be conducted at night. For the duration of the construction period night lighting consistent with security needs of the construction site would be visible from offsite until the perimeter wall and gate have been completed. The amount of night lighting introduced early during the construction period is not considered significant. Security lighting illuminating portions of the perimeter of the completed substation would likely remain visible. However, such exterior security lighting would adhere to City of Lake Elsinore regulations pertaining to shielding and focus of lighting to control spill over lighting effects and glare into surrounding areas. Therefore, the additional point light sources introduced by the Proposed Project are considered to be less than significant.

#### **Applicant Proposed Measures**

Because construction of the Proposed Project would result in less than significant impacts, no applicant proposed measures are proposed.

#### **Mitigation Measures**

As no significant visual impacts will be created during the construction phase of the Proposed Project, no mitigation measures are necessary.

#### **4.1.4.2 Operation Impacts**

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

Operation of the Proposed Project would not have a substantial impact on a scenic vista. The Proposed Project Site is situated on a broad valley floor at an elevation of approximately 1,300 feet. Viewshed defining ridgelines to the north, west, and southeast reach elevations of

1,600 feet, 1,560 feet, and 1,741 feet, respectively. When operational, the completed substation facilities including, TSPs, subtransmission lines and telecommunication lines would not interfere with views of the above ridgelines as seen from the I-15 Freeway (located approximately 1 mile to the northeast). Therefore, operation of the Proposed Project would have no impact on a scenic vista.

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

Operation of the Proposed Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The Proposed Project Site is devoid of distinguishing natural or man-made visual elements that would be considered to be scenic. The replacement of the existing surface features by an operational substation would not significantly damage scenic resources. Further, the low surface elevations would also place the completed and operational Fogarty Substation effectively out of view from the I-15 Freeway, an eligible State Scenic Highway<sup>2</sup>. The Proposed Project site is also located approximately 3,400 feet northeast of Lakeshore Drive, a City of Lake Elsinore designated Scenic Corridor. However, intervening development and distance eliminates potential views of the Project Site from this route. Therefore, operation of the Proposed Project would result in no impact to scenic resources.

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

Operation of the Proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings. The existing surface terrain and vegetation of the site have a commonplace appearance in the surroundings of the Proposed Project Site. The single-family residential structures immediately north and south of the site appear blighted and the yard area of the one to the south of Hoff Street is distinguished by visual clutter resulting from open air storage miscellaneous mechanical equipment and inoperable discards, makeshift sheds, and trailers. Other visible elements include the succession of 66 foot tall wooden poles that carry the Valley-Elsinore-Ivyglen subtransmission line across the local landscape and the existing Dryden Substation. No measures have been undertaken to visually screen or conceal either of the latter features.

The Proposed Project would connect to the Valley-Elsinore-Ivyglen subtransmission line by means of three TSPs located outside the northeast corner of the perimeter wall. The TSPs would be 75 feet in height (9 feet higher than the 66 foot heights of the existing wood poles that support the Valley-Elsinore-Ivyglen subtransmission line). Terra Cotta Road is the only public road that offers foreground views of the site. Views of the TSPs from Terra Cotta Road

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<sup>2</sup> The I-15 Freeway, located approximately one mile to the northeast of the Proposed Project Site, is classified as an "eligible" State Scenic Highway. Meaning that it may be a candidate for "official designation" in the future, but it is not currently designated as a State Scenic Highway.

## 4: ENVIRONMENTAL IMPACT ASSESSMENT

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### 4.1 Aesthetics

would be from distances of 400 feet and greater. Because the TSPs would be situated at the rear of the substation when viewed from Terra Cotta Road only the tops of the steel poles would become intermittently visible and would not appear to be taller than the existing wooden poles seen from closer distances. Applicant proposed measures, AES-SCE-1, and -2, would also be implemented to further reduce potential visual impacts of the TSPs.

The Proposed Project would also incorporate low-profile design elements, which limit the height of electrical equipment within the substation's perimeter walls to approximately 28 feet. The substation would contain electrical equipment needed to operate the substation, subtransmission lines into and out of the substation. The Project-screening landscaping planted within the 20- and 34-foot setbacks would screen or obscure views of it from the existing and possible future roadways surrounding the site. The low-profile design of the substation would help reduce any visual effects on potentially sensitive views at the site and within its surroundings. In addition, to further minimize the visual effects of the substation, it would be enclosed on all four sides by a wall with a minimum height of 8 feet that would be constructed in a manner consistent with community standards to the extent feasible. Access gates would also be a minimum of 8 feet high. The area immediately outside the wall surrounding the substation would be landscaped<sup>3</sup>. By enclosing the substation within an 8-foot high perimeter wall, and buffering it with Project-screening landscaping, most of the components of the substation would be out of view. Completion of the Proposed Project would not result in a significant impact to the visual quality and character of the site's surroundings.

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

Operation of the Proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. The Proposed Project Site will be unmanned and require minimal night lighting consistent with security needs. The 8-foot high perimeter wall will act to shield interior security lighting. Internal electrical equipment installation locations will be equipped with emergency flood lights that can be turned on in the event that nighttime repairs should become necessary. At all other times such emergency lighting would not be turned on. Security lighting illuminating portions of the perimeter of the completed substation and its gates would likely remain visible. However, such exterior security lighting would adhere to City of Lake Elsinore regulations pertaining to placement heights, shielding and focus of lighting to control spill over lighting effects and glare into surrounding areas. The Project would also implement applicant proposed measure AES-SCE-1 to further reduce potential impacts. Therefore, the additional point light sources introduced by the Proposed Project are considered to be less than significant.

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<sup>3</sup> The substation site would not be landscaped immediately following construction. Instead, as the surrounding area develops, a plan for substation landscaping would be prepared and would be consistent with community and city standards to the extent that they are not inconsistent with SCE safety standards.

### Applicant Proposed Measures

**AES-SCE-1:** To reduce the potential for reflection of sunlight from the proposed poles, reduce color contrasts, and visually unify the Project with the surrounding characteristic landscape, SCE would:

- a. Use only non-specular conductors (non-reflective)
- b. Use tubular steel poles for the Proposed Subtransmission Line that will weather to be non-reflective

**AES-SCE-2:** To reduce the contrast and presence of the Proposed Subtransmission Line, SCE will order galvanized TSPs with a flat finish.

### Mitigation Measures

As no significant visual impacts will be created during the operation phase of the Proposed Project, no mitigation measures are necessary.

## 4.1.5 ALTERNATIVES

### Alternative Project Site B

Site Alternative B occupies a 5.7 acre site lying directly west of Terra Cotta Road on the opposite side of the street from the Proposed Fogarty Substation Project. Site Alternative B is roughly rectangular in shape and the narrow end of the parcel that fronts along Terra Cotta Road contains terrain that slopes gently toward the street at a gradient of approximately 6.6%. The northeastern corner area of the site contains the temporary Dryden Substation and a gravel-surfaced parking area buffer that abuts southern and western sides of the substation. Terra Cotta Road south of the substation and graveled parking area formerly contained a single-family residence of which only concrete foundation remnants and front-door stairs remain. Former ornamental landscaping is present indicating the location of former walkways and planters in the yard area surrounding the structural remnants. The range of elevation on-site is approximately 135 feet. The elevation of the terrain at roadside (along the eastern boundary of the parcel) is 1,345 feet above mean sea level (msl). Site Alternative B's elevation increases westerly where its boundaries traverse the hillside slopes of the heights occupied by the adjacent Alberhill Ranch development. The site's highest elevations reach 1,480 feet near its southwest corner and locally adjacent slopes approach gradients of 40%.

Like the Proposed Project, the majority of site Alternative B the site is vacant and is situated in a rural area of the northwestern part of the City of Lake Elsinore that contains dispersed single-family residences and associated unoccupied non-residential structures. However, site Alternative B is visually distinguishable adjacent to Terra Cotta Road by the Dryden Substation and the remaining ornamental landscaping shrubs and trees that surrounded a former single-family residential structure and outbuilding. Where the site's surfaces transition to hillside slopes to the west they are characterized by both disturbed and undisturbed stands of coastal sage scrub. The prevailing vegetation of the hillsides consists of mixtures of xerophytic scrub (generally on the steeper slopes) and annual grassland (on gentler slopes) that turn from muted, dull and light greens to browns and yellows between early spring and late summer.

## 4: ENVIRONMENTAL IMPACT ASSESSMENT

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### 4.1 Aesthetics

Access to site Alternative B is the same as the Proposed Project.

Site Alternative B is located approximately one mile southwesterly of the Nichols Road on- and off-ramps from and overpass of the I-15 Freeway. The site's local low-lying elevation relative the surrounding hill terrain and clusters of intervening Peruvian pepper trees combine to make the site indistinguishable in fleeting westerly views from the freeway.

Like the Proposed Project, no scenic roadways or highways are located close enough to site Alternative B to allow noteworthy public views of it.

Site Alternative B would allow brief foreground views of the facility from distances as close as 25 feet to the future substation when bypassing it in either north or south directions on Terra Cotta Road. The completion of the site would replace the temporary substation with a larger one that would be surrounded by an 8 foot high masonry wall and perimeter tree and shrub landscaping planted within the setback strip from Terra Cotta Road. The low profile design of the facility would not interfere with views to distant viewshed-defining ridgelines to the north, east, or south of the facility. The change in view along the western side of Terra Cotta Road would last only for the time it would take motorists to pass by the site. The visual impact is considered to be less than significant.

Like the Proposed Project, the location of a new substation on site Alternative B would not have a substantial adverse effect on scenic vistas, would not substantially damage a scenic resource, would not substantially degrade the existing visual character or quality of the site or its surroundings, and would not create a new source of substantial light or glare. Further, the Alternative is consistent with applicable visual resources goals and policies of local planning documents. As a result, impacts to aesthetics would be less than significant.

### **Alternative Project Site C**

Site Alternative C is located approximately 1,750 feet east of the Proposed Fogarty Substation Project. The overall site consists of a 12.3 acre rectangular parcel that is oriented northwest to southeast along its longer axis. The northwesterly side of the site fronts for nearly 550 feet along Pierce Street. The site consists primarily of gently sloping terrain and has a range of relief of approximately 60 feet. The flattest northerly portions of the site, with easterly slope gradients of 3.7% were formerly used for raising row crops whereas the southern corner area of the site exhibits slightly steeper slopes (up to 16%) at the toe of hill terrain that was formerly used as grazing land. Native vegetation has been removed from the site to accommodate the raising of crops and the grazing of cattle. The vegetation covering the site is entirely dominated by non-native annual grassland. The dominant annual grassland of site and on adjacent slopes turn from bright springtime greens to shades of yellow and brown by late summer and fall.

Site Alternative C is situated along the southern side of a broad-floored alluvium-filled valley that is flanked to the north, west, and southeast by local hill top features visible from the site that crest at elevations of 1,741 feet, 1,660 feet, and 1,560 feet above mean sea level (msl), respectively. A spot elevation near the center of site Alternative C places its elevation at approximately 1,270 feet msl. Site Alternative C lacks trees and prominent terrain features that would make it visually distinguishable from other nearby vacant land. While site Alternative C is



vacant and is situated in a rural area of the northwestern part of the City of Lake Elsinore, a number of single family residences abut the southerly border of the site that are also accessed by Pierce Street. The segment of Pierce Street that bypasses site Alternative C is unpaved and consists of an un-improved dirt surface.

Access to site Alternative C is similar to the Proposed Project.

Site Alternative C site is located approximately 2,270 feet (0.43 mile) southwesterly of the Nichols Road on- and off-ramps from and overpass of the I-15 Freeway. The site's local low-lying elevation relative to the surrounding hill terrain and private landscaping on nearby residential properties tend to make the site indistinguishable in fleeting westerly views from the freeway.

Like the Proposed Project, no scenic roadways or highways are located close enough to the Alternative C location to allow noteworthy public views of it.

Site alternative C would allow brief foreground views of the prospective future substation to be seen from immediate foreground locations along Pierce Street by occasional motorists and local residences when bypassing the site. The completion of the site would replace the open grassland terrain with an electrical substation surrounded by an 8-high masonry wall and perimeter tree and shrub landscaping planted within the setback strip from Pierce Street and the southerly side boundary that faces a number of adjacent single family residences. The low profile design of the facility would not interfere with views to distant viewshed-defining ridgelines to the north, west, or southwest of the facility. The change in view along the immediate southerly side of Pierce Street would last only for the time it would take motorists to pass by the site. The visual impact is considered to be less than significant..

Like the Proposed Project, the location of a new substation on the site Alternative C would not have a substantial adverse effect on scenic vistas, would not substantially damage a scenic resource, would not substantially degrade the existing visual character or quality of the site or its surroundings, and would not create a new source of substantial light or glare. Further, Alternative C is consistent with applicable visual resources goals and policies of local planning documents. As a result, impacts to aesthetics would be less than significant.

#### 4.1.6 REFERENCES AND COMMUNICATIONS

- City of Lake Elsinore. January 2006. City of Visalia General Plan, Land Use Element.
- Smardon, R.C., J.F. Palmer, J.P. Fellman. 1986. *Foundations for Visual Project Analysis*. John Wiley & Sons, Inc. New York, NY.
- US Department of Agriculture (USDA). 1995. US Forest Service. Landscape Aesthetics, A Handbook for Scenery Management. Agriculture Handbook Number 701. U.S. Gov. Printing Office, Washington, D.C.
- US Department of Agriculture (USDA). 1974. US Forest Service. The Visual Management System, Volume 2, Chapter 1. USDA Handbook Number 462, U.S. Gov. Printing Office, Washington, D.C.

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##### 4.1 *Aesthetics*

US Department of the Interior. 1977. Bureau of Land Management. BLM manual, sections 6300, 6310, and 6320, Visual Resource Management. BLM, Washington, D.C.

Caltrans [online] <http://www.dot.ca.gov/hq/LandArch/scenic/scpr.htm>

August 2006, Personal Communication, Wendy Worthey, Principal Environmental Planner City of Lake Elsinore.

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## 4.2 Agricultural Resources

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### 4.2.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

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

The Division of Land Resource Protection of the CDC, classifies the most important statewide farmland categories as follows:

- Prime Farmland (**P**): Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. Namely the lands so classified have the soils qualities, growing season, and moisture supply needed to produce sustained high yields. In addition, in order to receive a **P** designation the land must have been irrigated at some time during the four years prior to the mapping date
- Farmland of Statewide Importance (**S**): Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. **S** land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date
- Unique Farmland (**U**): Farmland of lesser quality soils that must have been cropped at some time during the four years prior to the mapping date. **U** land is usually irrigated, but may include non-irrigated orchards or vineyards

Collectively, these important farmland categories are monitored in 10 acre minimum units by the FMMP statewide utilizing combinations of modern USDA soils surveys and existing land use observations recorded during even numbered years.

The Proposed Project site does not contain **P**-, **S**-, or **U**-categorized farmland as recorded by survey mapping under the FMMP of the area last concluded in 2004. The closest ranked important farmland category (**U**) to the site lies approximately 250 feet east of the site and it coincides with local tributary valley-bottom terrain that is connected with the nearly level terrain of the un-named intermittent southeasterly blue-line stream course that drains Walker Canyon.

The United States Geological Survey 7.5-minute Elsinore, California topographic map sheet (1953 edition) showed that the site was covered with scrub and that water resources improvements consisting of a windmill, a water reservoir, and a channeled drainage course in Walker Canyon were located 4,000 feet easterly of the Proposed Project site. The 1988 aerial photograph-revised 7.5-minute Elsinore map sheet showed that the Project site had been cleared of scrub vegetation and a second water reservoir had been added in the Walker Canyon area approximately 3,500 feet easterly of the site.

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### 4.2 Agricultural Resources

The USDA, Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service (SCS)) and other State agencies have mapped soils within Western Riverside County (soil types are discussed in Section 5.6 Geology and Soils, based on soils associations and series mapped by the USDA, SCS, 1971, in cooperation with the University of California Agricultural Experiment Station). In general, the soils associations mapped in the immediate vicinity of the proposed Fogarty Substation in western Riverside County are comprised of the Hanford-Tujunga-Greenfield and Cajalco-Temescal-Las Posas associations. More specifically, the soils units mapped on the Proposed Project site and the Project Area consist of Placentia fine sandy loams (**P1D**) and Altamont cobbly clays (**AbF**).

The western and northern sides of the Proposed Project site are fringed with P1D soils that transition on-site to AbF soils in the middle and western portions of the site. P1D soils (Placentia) soils occupy 2-15% slopes and are characteristically underlain by clay subsoils at depths of 10 inches. As a consequence soil permeability is rated as slow to very slow such that runoff may pose an erosion hazard. The soil type carries a Capability Classification of IVE-3 when irrigated. Because of clay layers at shallow depths the suitability of the potential range of crops that can be productively grown on them is limited. Poor soil permeability hinders the use of the soil for avocados and other tree crops. Suitable dry-farmed crops include small grains and forage crops. AbF soils consist of moderately deep to very deep well-drained clays. The soil type also carries a Capability Classification of IVE-5 when irrigated. The better-drained AbF soils are typically used for dry-farmed grain, annual pasture, and citrus, and for irrigated alfalfa within the areas containing the soil type. Under the NRCS soils Capability Classification both the above soils types possess a lower intermediate (IVE) Capability Classification, even when irrigated.

##### **Project Area**

The Proposed Project site is located within the limits of the City of Lake Elsinore in an area that was mapped as being vacant in 2001 (Figure 1-3, City of Lake Elsinore, General Plan Background Reports, 2006). Land uses and development of the Proposed Project site and its adjacent lands are subject to the preparation and approval of specific plans (Figure 1-1, Existing General Plan, City of Lake Elsinore General Plan, 2006).

#### **4.2.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

##### **Federal**

There are no Federal regulations applicable to the Proposed Project.

##### **State**

Regulations for the protection of important farmland are primarily implemented at the county and city levels, including the Williamson Act, the State's principal agricultural land protection program.

**Regional and Local**

SCE intends to develop facility designs that are compatible with local zoning; however, the Proposed Project is exempt from local land use and zoning regulations and permitting.

***City of Lake Elsinore***

The City of Lake Elsinore General Plan contains objectives and policies in the Open Space/Conservation Element to encourage the conservation of agricultural lands. The Proposed Subtransmission Line does not cross or border any agricultural preserve land within the City of Lake Elsinore.

**4.2.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to agricultural resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to nonagricultural use

**4.2.4 IMPACT ANALYSIS****4.2.4.1 Construction Impacts**

**Would the project convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use?**

Construction of the Proposed Project would not convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use. No Prime Soils (Capability Classes I and/or II) exist on site or in its immediate vicinity. Therefore, construction of the Proposed Project has no impact on the conversion of farmland to nonagricultural use.

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

The construction of the Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The Proposed Project is not subject to a Williamson Act contract, nor does it abut any properties that are subject to such a contract. Thus, construction of the Proposed Project would result in no impact to existing zoning for agricultural use, or a Williamson Act contract.

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### 4.2 Agricultural Resources

**Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to nonagricultural use?**

As stated above, construction of the Proposed Project would not result in conversion of farmland to a nonagricultural use. Thus, there is no impact to conversion of farmland to nonagricultural use associated with the construction of the Proposed Project.

##### **Applicant Proposed Measures**

Because construction of the Proposed Project would result in no impact to agricultural resources, no applicant proposed measures are provided.

##### **Mitigation Measures**

Because construction of the Proposed Project would result in no impact to agricultural resources, no mitigation measures are required.

##### 4.2.4.2 Operation Impacts

**Would the project convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use?**

Operation of the Proposed Project would not convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use. Therefore, operation of the Proposed Project has no impact on the conversion of farmland to nonagricultural use.

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

Operation of the Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The substation site is not subject to a Williamson Act contract, nor does it abut any properties that are subject to such a contract. Thus, operation of the Proposed Project would result in no impact to existing zoning for agricultural use, or a Williamson Act contract.

**Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to nonagricultural use?**

As stated above, operation of the Proposed Project would not result in conversion of farmland to a nonagricultural use. Thus, there is no impact to conversion of farmland to nonagricultural use associated with the Proposed Project.

##### **Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impact to agricultural resources, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation the Proposed Project would result in no impact to agricultural resources, no mitigation measures are required.

**4.2.5 ALTERNATIVES****Alternative Project Site B**

Alternative B is located across the street from the Proposed Project site. The impacts are the same as those of the Proposed Project. Therefore, Alternative B would result in no impact to agricultural resources.

**Alternative Project Site C**

Alternative C is located approximately 1,750 feet east of the Proposed Project site. The impacts are the same as those of the Proposed Project. Therefore, Alternative C would result in no impact to agricultural resources.

**4.2.6 REFERENCES AND COMMUNICATIONS**

California Department of Conservation (CDC). 2006. Division of Land Resource Protection [online] <http://www.conservation.ca.gov/index/index.htm> [cited May 12, 2006].

California Legislative Official Information. 2005. California Government Code section 51290-51295. From: <http://www.leginfo.ca.gov>.

City of Lake Elsinore. January 2006. General Plan Land Use and Recreation Element.

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## 4.3 Air Quality

### 4.3.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### *Air Basins*

The State of California is divided geographically into fifteen regional air basins to facilitate the management of air resources in the State. The Project Area is located within the South Coast Air Basin (SCAB), which is regulated by the South Coast Air Quality Management District (SCAQMD). The basin is bordered by the Pacific Ocean to the west, the San Gabriel and San Bernardino Mountains to the north, and San Jacinto Mountains to the east.

#### *Climate*

Temperatures reported for Lake Elsinore and the surrounding area fluctuate substantially with season. Average high temperatures in the summer routinely reach into the upper 90s, with average summertime lows in the high 50s to low 60s. Winter temperatures for the region are cooler, with highs in the 60s and lows around 30° F. Rainfall in the Lake Elsinore area averages 11.6 inches per year, but varies markedly from one year to the next.

#### *Baseline Air Quality*

Long-term air quality monitoring is carried out by the South Coast Air Quality Management District (SCAQMD) at various monitoring stations. There are no nearby stations that monitor the full spectrum of pollutants. Ozone and nitrogen oxides are monitored at the Lake Elsinore facility, while 10-micron diameter particulate matter (PM-10) is measured at the Perris Valley station. The closest data resource for other particulate species is in Riverside. A summary of the last six years of monitoring data from a composite of available data resources is shown below (**Table 4.3-1, Project Area Air Quality Monitoring Summary -1999-2005**).

After some marked improvement in ozone air quality in the last 20 years, the past six years have shown very little change in ozone levels. The year 2000 had the fewest violations of standards and the lowest maximum concentration. The last five years have shown slight increases from the cleanest year on record (2000). Year-to-year meteorological variations may be affecting the trend. However, it is clear that the rate of growth is balancing any slow emissions reductions. Completely healthful ozone air quality is not likely to be achieved in the very near future.

Particulate levels have traditionally been high in western Riverside County. While the ozone trend is very flat in the project vicinity, particulate levels continue to show some slow continuing improvement. In the last six years, the frequency of days exceeding State PM-10 standards has dropped from around 50 percent of all days to less than 30 percent. The Federal PM-10 standard has not been exceeded in almost ten years in northwestern Riverside County, including Lake Elsinore. As with ozone, the Project's location downwind of emissions sources in coastal regions will likely cause the most stringent PM-10 standards to be exceeded for well into the current decade.

More localized pollutants such as carbon monoxide, nitrogen oxides, lead, etc. are very low near the Project Area because background levels even in downtown Riverside never exceed allowable levels, and there are almost no sources of such emissions near the Project Area. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NO<sub>x</sub> or CO without any threat of violating applicable Ambient Air Quality Standards (AAQS).

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.3 Air Quality

2.5-micron diameter particulate matter (PM-2.5) levels are chronically elevated in the Riverside area. The Inland Empire averages around 10 days with violations of the Federal PM-2.5 standard. PM-2.5 is created mainly from chemical reactions between complex air pollutants and from combustion by-products (especially diesel). There is no clear-cut trend in the PM-2.5 data in Table 4.3-1, but 2003 was the cleanest year on record with only one violation.

**Table 4.3-1: Project Area Air Quality Monitoring Summary – 1999-2005  
(Days Standards Were Exceeded and Maximum Observed Levels)**

Pollutant/Standard	2000	2001	2002	2003	2004	2005
<b>Ozone<sup>1</sup></b>						
1-hour > 0.09 ppm	45	62	52	50	34	37
1-hour > 0.12 ppm	1	12	6	7	2	4
8-hour > 0.08 ppm	26	46	41	36	21	15
Max 1-hour Conc. (ppm)	0.128	0.115	0.139	0.154	0.130	0.149
<b>Carbon Monoxide<sup>3</sup></b>						
1-hour > 20. ppm	0	0	0	0	0	0
8- Hour > 9. ppm	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	5.3	5.2	2.5 <sup>1</sup>	4.0 <sup>1</sup>	2.0 <sup>1</sup>	2.0 <sup>1</sup>
Max 8-hour Conc. (ppm)	4.3	3.5	1.9 <sup>1</sup>	1.4 <sup>1</sup>	1.1 <sup>1</sup>	1.0 <sup>1</sup>
<b>Nitrogen Dioxide<sup>1</sup></b>						
1-hour > 0.25 ppm	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	0.078	0.091	0.074	0.074	0.090	0.07
<b>Inhalable Particulates (PM-10)<sup>2</sup></b>						
24-Hour > 50 µg/m <sup>3</sup>	13/59	16/60	21/61	17/58	15/59	19/60
24-Hour > 150 µg/m <sup>3</sup>	0/59	0/60	0/61	0/58	0/59	0/123
Max. 24-Hr. Conc. (µg/m <sup>3</sup> )	87.	86.	95.	135.	79.	80.
<b>Ultra-Fine Particulates (PM-2.5)<sup>3</sup></b>						
24-Hour > 65 µg/m <sup>3</sup>	11/304	17/325	8/325	1/349	5/343	4/334
Max. 24-Hr. Conc. µg/m <sup>3</sup> )	119.6	98.0	77.6	104.3	91.7	98.7
Source: South Coast AQMD – <sup>1</sup> Lake Elsinore, <sup>2</sup> Perris and <sup>3</sup> Rubidoux Air Monitoring Station Data Summaries.						

#### 4.3.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

Air quality is described by comparing contaminant levels in ambient air samples to national and State standards. Ambient air quality standards in California are the responsibility of the US Environmental Protection Agency and the California Air Resources Board (CARB). Standards are

set at levels of concentrations to provide a significant level of safety to public health and to protect public welfare.

### **Federal**

The Clean Air Act (amended in 1990) requires the US EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. *Primary standards* set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. *Secondary standards* set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The US EPA has set NAAQS for six principal or "criteria" pollutants:

- Ozone (O<sub>3</sub>)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO<sub>2</sub>)
- Sulfur dioxide (SO<sub>2</sub>)
- Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>)
- Lead (Pb)

The California Air Resources Board has set California Ambient Air Quality Standards (CAAQS) for four additional pollutants. They include:

- Visibility Reducing Particles
- Sulfates (SO<sub>4</sub>)
- Hydrogen Sulfide (H<sub>2</sub>S)
- Vinyl Chloride

The ambient air quality standards are listed in **Table 4.3-2, Ambient Air Quality Standards**.

Pursuant to the Clean Air Act, the US EPA classified air basins (i.e. distinct geographic regions) as either "attainment" or "non-attainment" for each criteria pollutant, based on whether or not the Federal ambient air quality standards have been achieved. National air quality standards are set at levels determined to be protective of public health with an adequate safety margin. Some air basins have not received sufficient analysis for certain criteria air pollutants and are designated as "unclassified" for those pollutants.

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.3 Air Quality

		California Standards		Federal Standards		
Pollutant	Averaging Time	Concentration	Method	Primary	Secondary	Method
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	0.12 ppm (235 µg/m <sup>3</sup> )	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (140 µg/m <sup>3</sup> )		0.08 ppm (157 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		50 µg/m <sup>3</sup>		
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	No Separate State Standard		65 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	15 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—	—
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	(new standard pending)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m <sup>3</sup> )		—		
Lead	30-Day average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m <sup>3</sup>	Same as Primary Standard	High Volume Sampler and Atomic Absorption

**Table 4.3-2: Ambient Air Quality Standards**

		California Standards		Federal Standards		
Pollutant	Averaging Time	Concentration	Method	Primary	Secondary	Method
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 µg/m <sup>3</sup> )	–	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )	–	
	3 Hour	–		–	0.5 ppm (1,300 µg/m <sup>3</sup> )	
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )		–	–	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

**State*****California Air Resource Board***

The California Air Resources Board (CARB) was created by the Mulford-Carrell Air Resources Act in 1968. The CARB's primary responsibilities include to (1) develop, adopt, implement and enforce the State's motor vehicle pollution control program; (2) administer and coordinate the State's air pollution research program; (3) adopt and update the State's ambient air quality standards; (4) review the operations of the local air pollution control districts; and (5) review and coordinate the State Implementation Plans for achieving Federal ambient air quality standards.

Because California already had standards in existence before Federal AAQS were established, and because of unique meteorological problems in California, there is considerable diversity between State and Federal standards. California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants are listed in Table 4.3-2, Ambient Air Quality Standards.

The entries in Table 4.3-1 include the 1997 Federal standards for chronic (8-hour) ozone exposure and for ultra-small diameter particulate matter of 2.5 microns or less in diameter (called "PM-2.5").

### 4.3 Air Quality

EPA has designated the South Coast Air Basin as an extreme non-attainment area for the 8-hour ozone standard. Ultimate attainment of this standard is mandated for 2021.

The California PM-2.5 standard is more stringent than the Federal standard. This standard was adopted on June 20, 2002. The State standard requires a demonstration of continued improvement toward attainment, but sets no absolute timetable. In this way, the State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a Federal clean air standard. The State standard became enforceable in 2003 when it was incorporated into the California Health and Safety Code.

The California 8-hour ozone standard is also slightly more stringent than the Federal standard. It does not have a specific attainment deadline, but only that continued progress toward attainment must be demonstrated.

#### ***Toxic Air Contaminants***

Toxic air contaminants (TAC) are regulated because they are suspected or known to cause cancer, birth defects, neurological damage, or death. There are no established ambient air quality standards for toxic air contaminants. Instead, they are managed on a case-by-case basis depending on the quantity and type of emissions and proximity of potential receptors. Statewide and local programs identify industrial and commercial emitters of toxic air contaminants and require reduction in these emissions. There are also Federal programs that require control of certain categories of TACs. The CARB recently identified diesel particulate matter as a TAC. In October 2000, the CARB released the *Risk Reduction Plan to Reduce Particulate Matter Emission from Diesel-Fueled Engines and Vehicles*. This plan identifies diesel particulate matter as the predominant TAC in California and proposed various methods for reducing diesel emissions from mobile equipment.

#### **Regional and Local** ***Air Quality Planning***

It is the responsibility of the SCAQMD to ensure State and Federal ambient air quality standards are achieved and maintained within its jurisdiction, which includes the Project Study Area. The SCAQMD is required by law to produce plans indicating the methods for improving air quality as needed. Every three years the SCAQMD devises a new plan for the district.

The SCAQMD has designated significant emissions levels for CEQA purposes. **Table 4.3-3, SCAQMD Emissions Significance Thresholds (pounds/day)** provides the daily emissions thresholds:

**Table 4.3-3: SCAQMD Emissions Significance Thresholds (pounds/day)**

Pollutant	Construction	Operations
ROG	75	55
NO <sub>x</sub>	100	55
CO	550	550
PM-10	150	150
Sox	150	150
Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.		

**Local Significance Thresholds**

Local significance thresholds (LSTs) provide a method for assessing the significance of air quality impacts to local sensitive receptors when projects are disturbing less than five acres on any given day.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), and particulate matter less than 10 microns in aerodynamic diameter (PM<sub>10</sub>). Because the Project has negligible operational emissions, LSTs were analyzed only for construction. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. For PM<sub>10</sub>, LSTs were derived based on requirements in SCAQMD Rule 403 – Fugitive Dust. The LSTs for Perris Valley and Lake Elsinore Air Monitoring Areas are listed below in **Table 4.3-4, Local Significance Thresholds**.

**Table 4.3-4: Local Significance Thresholds**

Pollutant	Allowable Emissions (lbs/day) as a Function of Receptor Distance (Meters) from Site Boundary									
	1 Acre					2 Acre				
	25m	50m	100m	200m	500m	25m	50m	100m	200m	500m
NO <sub>x</sub> and NO <sub>2</sub>	230	288	415	661	1294	334	388	505	747	1356
CO	650	964	1,913	4,913	21,425	920	1,357	2,415	5,655	22,898
PM <sub>10</sub>	4	11	99	186	274	6	19	107	195	283
NOTE: m = meters Source: SCAQMD 2002										



#### 4.3.3 SIGNIFICANCE CRITERIA

According to the CEQA significance criteria, the Proposed Project would result in a significant impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)
- Expose sensitive receptors to substantial pollutant concentrations
- Create objectionable odors affecting a substantial number of people

#### 4.3.4 IMPACT ANALYSIS

##### 4.3.4.1 CONSTRUCTION IMPACTS

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

Construction of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The air quality plan that is applicable to the Project is the SCAQMD's 2003 Air Quality Management Plan. Construction of the Proposed Project does not conflict with SCQAMD growth projections for the region, and would not result in a violation of air quality standards, as described below. Therefore, Construction of the Proposed Project would result in no impact to the applicable air quality plan.

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

Construction of the Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. During the construction phase of the Proposed Project emissions from operation of heavy equipment and support vehicles would be generated. In addition, fugitive dust would also be generated during clearing, grading or scraping activities associated with site preparation, temporary access road construction, pole installation, and duct bank construction and vault installation. However, the Proposed Project would not conflict with or obstruct implementation of applicable air quality plans.

The entire project site occupies approximately 6.6 acres. The substation disturbance "footprint" for the proposed uses will be 2.3 acres. Because the easement for 3 TSPs and overhead subtransmission and telecommunications lines would not require grading or other substantial earth movement activities, emissions are not included in the calculations. The calculated PM-10 emissions with the application of "standard" dust control, and with the application of enhanced dust control measures, are shown in **Table 4.3-5, Construction Generated PM-10**.



**Table 4.3-5: Construction Generated PM-10**

Disturbance Area	With Standard Dust Control	With Best Available Control Measures
2.3 acres	61.5. pounds/day	23.3 pounds/day

While usage of best available control measures (BACMs) is not required to achieve less-than-significant PM-10 dust emissions, SCE will use BACMs for the Proposed Project.

Current research in particulate exposure health effects suggests that the most adverse effect derives from ultra-small diameter particulate matter comprised of chemically reactive pollutants such as sulfates, nitrates or organic material. A national clean air standard for particulate matter of 2.5 microns or smaller in diameter (called "PM-2.5") was adopted in 1997. Very little construction activity particulate matter is in the PM-2.5 range. Soil dust is also more chemically benign than typical urban atmospheric PM-2.5. The limited amount of PM-2.5 within the sub-threshold PM-10 burden further reinforces the finding of a less-than-significant air quality impact. In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard. With a low population density downwind of the project site, dust nuisance potential for this project is not considered individually significant.

Exhaust emissions would result from on- and off-site heavy equipment during grading. Emissions would also be generated during construction of the perimeter wall equipment installation and partial site paving.

Construction activity equipment/vehicle exhaust emissions were calculated by combining emissions data from the project construction schedule with peak hours of operations. The major construction functions will include site grading, perimeter wall construction, transformer installation and site paving. Minor functions such as TSP, subtransmission line, telecommunication line and control panel installation, and testing will require less equipment than the above activities. Construction activities will be generally sequential such that there is minimal overlap.

**Table 4.3-6, Construction Equipment Emissions** presents resulting exhaust emissions, compared to the SCAQMD CEQA Handbook thresholds, (pounds/day):

**Table 4.3-6: Construction Equipment Emissions**

	CO	NOx	PM-10	SOx	ROG
Grading	16.1	45.1	0.5	1.8	0.8
Civil/Foundations	14.7	29.5	1.5	4.9	2.8
Transformer Install	6.3	12.5	0.7	1.2	1.4
Site Paving	13.9	29.1	1.8	4.9	3.2
Electrical	9.3	14.4	0.7	0.4	1.7
SCAQMD Threshold	550.0	100.0	150.0	150.0	75.0
Calculation shown in Appendix F.					

None of the construction-based emissions will exceed the SCAQMD significance thresholds. The Proposed Project would not violate air quality standards incorporation of applicant proposed measures (**AIR-SCE-1, -12**) would further reduce impacts. Construction impacts to air quality standards or to an existing or projected air quality violation are considered less than significant.

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

The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutants. If a project exceeds the AQMD significance thresholds, by definition it will have a significant individual and cumulative air quality impact. The thresholds address regional air quality impacts for criteria pollutants, by limiting contributions for individual projects. The Project region is in non-attainment for ozone, PM-10, and CO; however, the Proposed Project's emissions would not exceed the thresholds for any criteria pollutant. Implementation of applicant proposed measures, (AIR-SCE-1 – 12), would further reduce impacts. Therefore the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutants.

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

Construction of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Table 4.3-4 shows LSTs for all criteria pollutants. The maximum local emissions would equal the sum of emission from combustion equipment and dust from grading. Assuming 10 percent of PM-10 is PM-2.5, and 100 percent of combustion PM-10 is also PM-2.5, maximum daily construction emissions compare to the screening level LST thresholds for a 2.3 acre site with the closest homes at slightly over 100 meters from the activity as follows:

Parameter	CO	NOx	PM-10	PM-2.5
Maximum Construction Activity	16	45	25	4
LST Threshold	2415	505	107	10

Sensitive receptors include schools, residential areas, and other sensitive uses, such as parks. LSTs are intended to minimize the local effects to sensitive receptors. The Proposed Project would not exceed LST values for the area during construction. Implementation of applicant proposed measures (AIR-SCE-1 -12) would further reduce impacts.

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

Construction of the Proposed Project would not create objectionable odors affecting a substantial number of people. Exhaust from construction vehicles may temporarily create odors from the combustion of fuel. The level of odoriferous emissions would likely not cause a perceptible odor to any sensitive receptors. Any odors that are perceptible would be temporary. Construction impacts associated with objectionable odors affecting a substantial number of people would be less than significant.

**Applicant Proposed Measures**

SCE proposes standard air quality control measures indicated below to reduce the impacts of air pollutant emissions from construction activities:

- AIR-SCE-1:** All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- AIR-SCE-2:** All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- AIR-SCE-3:** When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- AIR-SCE-4:** Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- AIR-SCE-5:** Use of clean-burning, on-road and off-road diesel engines. Where feasible, heavy-duty diesel powered construction equipment manufactured after 1996 (with Federally mandated “clean” diesel engines) would be utilized.
- AIR-SCE-6:** All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- AIR-SCE-7:** Construction workers would carpool when possible.
- AIR-SCE-8:** Vehicle idling time would be minimized.
- AIR-SCE-9:** Limit traffic speeds on unpaved roads to 15 mph.

##### 4.3 Air Quality

- AIR-SCE-10:** CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.
- AIR-SCE-11:** All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program is considered to comply with this measure.
- AIR-SCE-12:** All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.

##### Mitigation Measures

As no significant air quality impacts will be created during the construction phase of the Proposed Project, no mitigation measures are necessary.

##### 4.3.4.2 Operation Impacts

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

Operation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The air quality plan that is applicable to the Project is the SCAQMD's 2003 AQMP. The Proposed Project does not conflict with SCQAMD growth projections for the region, and would not result in a violation of air quality standards. Therefore, Operation of the Proposed Project would result in no impact to the applicable air quality plan.

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

Operation of the Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Once construction is complete, operation emissions would result from emissions from vehicles that would be necessary for periodic inspection, maintenance, and repair. No stationary emissions sources would be associated with the Proposed Project. Operation related impacts to air quality standards or to an existing or projected air quality violation are considered less than significant.

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

As stated above, operation of the Proposed Project would result in minimal emissions associated with periodic maintenance of the facility. Impacts to ambient air quality standards resulting from the operation of the Proposed Project would be less than significant.

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

The substation would be unmanned and the electrical equipment within the substation would be remotely monitored and controlled by a power management system. Due to the substation being remotely operated, SCE personnel would generally visit for electrical switching and routine maintenance. Impacts associated with operation of the Proposed Project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. There would be no impacts to sensitive receptors as a result of the Proposed Project.

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

There would be minimal emissions to air during operation of the Proposed Project, and subsequently no impacts related to objectionable odors.

#### **Applicant Proposed Measures**

Because operation of the Proposed Project would result in less than significant impacts to air quality, no applicant proposed measures are provided.

#### **Mitigation Measures**

Because operation of the Proposed Project would result in less than significant impacts to air quality, no mitigation measures are required.

### **4.3.5 ALTERNATIVES**

#### **Alternative Project Site B**

As Alternative B would construct a substation identical to, and in a location immediately west of the Proposed Project site, its impacts upon air quality would be similar in all respects. Alternative B would not result in significant impacts to air quality.

#### **Alternative Project Site C**

Alternative C has frontage on Pierce Street, and is located approximately 1,750 feet east of the Proposed Fogarty Substation Site. Impacts associated with air quality would be similar to the Proposed Project site and Alternative B in most respects during construction and operation. The proximity of Alternative C to neighboring homes could be significant, however meteorological influences drive winds from northwest to southeast and out over open space during the day, thus carrying construction related fugitive dust away from adjacent homes. This wind pattern would therefore, limit impacts associated with air quality to less than significant. Furthermore, based on

site topography, site Alternative C will require less grading than the Proposed Project, thus fugitive dust created by grading activities will be less.

#### 4.3.6 REFERENCES AND COMMUNICATIONS

California Air Resources Board, The 2005 California Almanac of Emission & Air Quality.

California Air Resources Board, 2002.

California Air Resources Board, The 2005 California Almanac of Emission & Air Quality.

SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

South Coast AQMD – <sup>1</sup>Lake Elsinore, <sup>2</sup>Perris and <sup>3</sup>Rubidoux Air Monitoring Station Data Summaries.

URBEMIS, 2002 for Windows with Enhanced Construction Module Version 8.7 Emissions Estimation for Land Use Development Projects. Software User's Guide: Appendix H Construction Equipment Emission Factors.

<http://www.urbemis.com/software/URBEMIS2002%20User's%20Manual.pdf>

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## 4.4 Biological Resources

### 4.4.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### Background Research

This section provides an overview of methods used to evaluate biological resources in the Project Area for the Proposed Fogarty Substation Project. Evaluation of botanical and wildlife resources began with review of pertinent literature and databases, and was followed by field surveys. The following resources were used in background research and during field surveys.

- California Natural Diversity Database (CNDDDB 2006)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2006)
- Biological Technical Report for the Fogarty Substation Project (AMEC 2006)
- Aerial Photos
- Land Use Maps (County of Riverside, and Cities of Lake Elsinore)
- The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (County of Riverside 2003)
- Soil Survey of Western Riverside Area California (USDA 1971)

#### Survey Methods

Biological surveys and habitat suitability assessments were conducted within the Project Area on May 5, 2006 and July 22, 2006. Surveys were conducted by walking all areas of proposed disturbance. Surveys determined the presence and likelihood of special-status plant and animal species in the Project Area and allowed vegetation communities within the Project Area to be mapped. Botanical surveys were performed when most sensitive plant species would be detectable. Data was collected by numerous techniques including the use of a hand-held geographic positioning system (GPS), standardized data forms, photographs, and aerial field maps.

#### ***Vegetation Mapping Methods***

Vegetation mapping of the Project Area was conducted by visual examination. The purpose of these surveys was to identify vegetation and land cover within the Project Area. Vegetation communities along each segment were noted on ortho-rectified aerial photographs of the Project Area and were described according to the MSHCP Conservation Area descriptions (County of Riverside 2003). Dominant plant species were also recorded.

#### ***Special-status Plant Species Survey Methods***

Botanical surveys of Project Area were conducted following the CDFG *Guidelines for Assessing the Effects of Proposed Project on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG 2006) and the CNPS *Botanical Survey Guidelines* (CNPS 2001). The field surveys were scheduled to coincide with the season of year when observations of sensitive



##### 4.4 Biological Resources

plant species were most likely to occur. All vascular plant species' observed during surveys are documented in **Appendix C**. Sensitive plant species encountered were mapped using GPS and added to the GIS database.

##### ***Special-status Wildlife Habitat Assessment Methods***

Wildlife surveys of the Project Area were conducted to characterize wildlife habitat types and evaluate the potential for occurrence of special-status wildlife species in the Project Area. The Project Area was traversed on foot to survey each vegetation community and look for evidence for wildlife presence. All wildlife and wildlife signs, including tracks, fecal material, nests, and vocalizations are noted in Appendix C. All sensitive wildlife species encountered were mapped and added to the GIS database.

Habitat within each parcel was also specifically assessed for burrowing owl (*Athene cunicularia*) presence, use, and potential use in compliance with the MSHCP. Burrowing owl habitat assessment surveys were conducted according to the CDFG *Burrowing Owl Consortium Guidelines* (CDFG 1993) and the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006).

Areas with potential burrowing owl habitat, including grasslands, sage scrub, and low growing vegetation were surveyed for potential owl burrows and owls. These surveys included ground squirrel and ground squirrel burrow surveys. Biologists walked areas of potential habitat while searching for burrowing owls, potential and active burrows, and owl sign such as feathers, pellets, and prey items.

Surveys were conducted to allow 100 percent visual coverage of potential habitat. The survey area included a 500-foot buffer area from each parcel boundary. The guidelines require that, if the Proposed Project Site contains burrows that could be used by burrowing owls, survey efforts should be directed towards determining owl presence.

##### **Habitats**

##### ***Overview of Project Study Area Habitats***

The Proposed Project Site is located in western Riverside County within the City of Lake Elsinore, California. The Project Area traverses portions of the Lake Elsinore U.S. Geological Survey (USGS) 7.5-minute series topographic quadrangle. The topography in the general vicinity is generally flat or gently to moderately sloped, and contains a combination of agricultural, municipal, private, and reserve land, most with previous disturbance.

The region is located within a Mediterranean climate consisting of warm, dry summers and mild, wet winters. In summer, temperatures often reach 100° F and winter temperatures fall to the 30°s, with an occasional freeze. Average annual temperature ranges are fairly moderate for the area, ranging from 49.3° F to 79.5° F. Average total precipitation for the area is approximately 10 to 15 inches per year (Western Regional Climate Center 2005).



### **Vegetation Communities**

The Project Area is located on predominantly flat areas that have historically been used for grazing and agriculture. The plant communities and types of land cover found in the Proposed Project Site is nonnative grasslands, and developed disturbed land (ruderal habitat). Additional plant communities found within the general vicinity include southern willow scrub, freshwater marsh and alkali marsh habitats. The existing environment for vegetation within the Project Area are discussed in more detail below, and shown in **Figure 4.4.1 Vegetation Communities and Sensitive Species**, as they are characterized by the Western Riverside County MSHCP. The MSHCP vegetation communities are based on the vegetation communities presented in the *Preliminary Descriptions of Terrestrial Natural Communities of California* (Holland 1986).

### **Coastal Sage Scrub**

In western Riverside County, coastal sage scrub is found both in large contiguous blocks scattered throughout the county as well as integrated with chaparral and grasslands. A characteristic suite of low-statured, aromatic, drought-deciduous shrubs, and subshrub species dominates coastal sage scrub. Composition varies substantially depending on physical circumstances and the successional status of the vegetation community; however, characteristic species include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), California encelia (*Encelia californica*), and several species of sage (e.g., *Salvia mellifera*, *S. apiana*). Other common species include brittlebush (*Encelia farinosa*), lemonadeberry (*Rhus integrifolia*), sugarbush (*R. ovata*), yellow bush penstemon (*Keckiella antirrhinoides*), Mexican elderberry (*Sambucus mexicana*), sweetbush (*Bebbia juncea*), boxthorn (*Lycium* spp.), shore cactus (*Opuntia littoralis*), coastal cholla (*O. prolifera*), tall prickly-pear (*O. oricola*), and species of dudleya (*Dudleya* spp.) (County of Riverside 2003).

A disturbed qualifier was placed on coastal sage scrub (or any other native habitat) based on mechanical disturbance (e.g., brushing or clearing, off-road vehicle activity). The community was mapped as disturbed coastal sage scrub only when there was evidence of disturbance such as soil compaction, firebreak clearing, repeated burns, or other activities that have left a sparse, scattered cover of shrubs, or introduced a cover of nonnative species that have become established as part of the community.

### **Nonnative Grassland**

Nonnative grasslands are likely to be dominated by several species of grasses that have evolved to persist in concert with human agricultural practices: slender oat (*Avena barbata*), wild oat (*Avena fatua*), fox tail chess (*Bromus madritensis*), soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), barley (*Hordeum* spp.), rye grass (*Lolium multiflorum*), English ryegrass (*Lolium perenne*), rat-tail fescue (*Vulpia myuros*), and Mediterranean schismus (*Schismus barbatus*) (County of Riverside 2003).

### **Developed or Disturbed Land**

Developed or disturbed lands consist of areas that have been disced, cleared, or otherwise altered. Developed lands may include roadways, existing buildings, and structures. Disturbed lands may include ornamental plantings for landscaping, escaped exotics, or ruderal vegetation dominated by nonnative, weedy species such as mustard (*Brassica* sp.), fennel (*Foeniculum*

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Revision date: February 14, 2007



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*vulgare*), tocalote (*Centaurea melitensis*), and Russian thistle (*Salsola tragus*) (County of Riverside 2003).

### **Riparian Forest, Woodland, and Scrub**

Riparian vegetation, including forest, woodland, and scrub subtypes, is distributed in waterways and drainages throughout much of western Riverside County. Depending on community type, a riparian community may be dominated by any of several trees/shrubs, including box elder (*Acer negundo*), bigleaf maple (*Acer macrophyllum*), coast live oak (*Quercus agrifolia*), white alder (*Alnus rhombifolia*), sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), California walnut (*Juglans californica*), Mexican elderberry, wild grape (*Vitis girdiana*), giant reed (*Arundo donax*), mule fat (*Baccharis salicifolia*), tamarisk (*Tamarix* spp.), or any of several species of willow (*Salix* spp.). In addition, various understory herbs may be present, such as saltgrass (*Distichlis spicata*), wild cucumber (*Marah macrocarpus*), mugwort (*Artemisia douglasiana*), stinging nettle (*Urtica dioica*), and poison-oak (*Toxicodendron diversilobum*) (County of Riverside 2003).

A subcategory of this habitat within the Project Area includes the Southern Willow Scrub vegetation community. This community is characterized by a dense riparian thicket that is dominated by several willow species with scattered cottonwood and sycamore shrub level species (Holland 1986).

### **Meadows and Marshes**

Meadow and marsh vegetation communities occur in both flowing and still water. This vegetation community includes cattails (*Typha* spp.), bulrushes (*Scirpus* spp.), sedges (*Carex* spp.), spike rushes (*Eleocharis* spp.), flatsedges (*Cyperus* spp.), smartweed (*Polygonum* spp.), watercress (*Rorippa* spp.), and yerba mansa (*Anemopsis californica*). It also contains perennial and biennial herbs (e.g., *Oenothera* spp., *Polygonum* spp., *Lupinus* spp., *Potentilla* spp., and *Sidalcea* spp.) and grasses (e.g., *Agrostis* spp., *Deschampsia* spp., and *Muhlenbergia* spp.). Rooted aquatic plant species with floating stems and leaves also may be present, such as pennywort (*Hydrocotyle* spp.), water smartweed (*Polygonum amphibium*), pondweeds (*Potamogeton* spp.), and water-parsley (*Oenanthe sarmentosa*) (County of Riverside 2003).

Subcategories of this vegetation type within the Project Area include Coastal and Valley Freshwater Marsh and Alkali Marsh habitats. The Coastal and Valley Freshwater Marsh habitat is dominated by perennial, emergent monocots dominated by bulrush and cattail species. The Alkali Marsh habitat occurs in areas with moist, highly alkaline soil that usually lack water at the surface. Typical Alkali Marsh species include yerba mansa, saltgrass (*Distichlis spicata*), alkali-heath (*Frankenia salina*), cattails (*Typha* spp.), common pickleweed (*Salicornia virginica*), marsh flea-bane (*Pluchea odorata*) and sedges (County of Riverside 2003).

### **Special Status Species**

#### **Plants**

A number of special-status plant species occur or have the potential to occur in the Project Area. According to the CNPS *Electronic Inventory of Rare or Endangered Vascular Plants of*

### 4.4 *Biological Resources*

*California* (CNPS 2006) and the CDFG *RareFind3* database, 51 special-status plant species are known to occur or have the potential to occur in the general vicinity of the proposed Fogarty Substation Project. **Table 4.4-1 Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area** identifies these species and provides additional information, such as habitat needs, flowering periods, potential for occurrence within the Project Area, and listing status including MSHCP coverage. For further description, the technical study for the Proposed Project is provided as an appendix to this document.

#### ***Wildlife***

A number of special status wildlife species occur or have the potential to occur in the Project Area (**Table 4.4-2 Special Status Wildlife Species Known to Occur or with the Potential to Occur within the Project Area**). For further description, the technical study for the Proposed Project is provided as an appendix to this document.

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	1B.1	Jan-Sept	Chaparral, Coastal Scrub, Desert Dunes/sandy	Moderate. Suitable habitat exists.
<i>Allium munzii</i>	Munz's onion	1B.1 FE ST MSHCP Narrow Endemic	Mar-May	Chaparral, Cismontane, Woodland Coastal Scrub, Pinyon/Juniper Woodland, Valley and Foothill Grassland/ mesic, clay	Moderate. Suitable habitat exists.
<i>Ambrosia pumila</i>	San Diego ambrosia	1B.1 FE MSHCP Narrow Endemic	May-Sept	Chaparral, Coastal Scrub, Valley and Foothill Grassland, Vernal Pools/often in disturbed areas	High. Present within the general vicinity.
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch	1B.1 MSHCP Covered Species	Dec-Apr	Chaparral, Cismontane Woodland, Coastal Scrub, Valley and Foothill Grassland/sandy or rocky	Moderate. Suitable habitat exists.
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale	1B.1 FE MSHCP Covered Species	Apr-Aug	Playas, Valley and Foothill Grassland (mesic), Vernal Pools/alkaline	High. Present within the general vicinity.
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2 MSHCP Criteria Species	Mar-Oct	Coastal bluff Scrub, Coastal Dunes, Coastal Scrub, Valley and Foothill Grassland/alkaline or clay	High. Alkaline soils exist within the Project Area.



#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.4 Biological Resources

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Atriplex pacifica</i>	South Coast saltscale	1B.2 MSHCP Covered Species	Mar-Oct	Coastal Bluff Scrub ,Coastal Dunes, Coastal Scrub, Playas	Moderate. Suitable habitat exists.
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1 MSHCP Criteria Species	Jun-Oct	Coastal Scrub, Playas, Vernal Pools	Moderate. Suitable habitat exists.
<i>Atriplex serenana</i> var. <i>dauidsonii</i>	Davidson's saltscale	1B.2 MSHCP Criteria Species	Apr-Oct	Coastal Bluff Scrub, Coastal Scrub/alkaline	High. Alkaline soils exist within the Project Area.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	1B.1 FT SE MSHCP Criteria Species	Mar-Jun	Chaparral, Cismontane Woodland, Coastal Scrub, Playas, Valley and Foothill Grassland, Vernal Pools/often clay	Moderate. Suitable habitat exists.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	1B.1 MSHCP Covered Species	May-July	Closed Cone Coniferous Forest,Chaparral, Cismontane Woodland, Meadows, Valley and Foothill Grassland, Vernal Pools/mesic, clay, sometimes serpentine	Moderate. Suitable habitat exists.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	1B.2 MSHCP Covered Species	May-July	Chaparral, Cismontane Woodland, Coastal Scrub, Lower Montane Coniferous Forest, Valley and Foothill Grassland/granitic, rocky	Moderate. Suitable habitat exists.

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	1B.2 MSHCP Covered Species	May-July	Chaparral, Coastal Scrub, Valley and Foothill Grassland/rocky	Moderate. Suitable habitat exists.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	1B.1 MSHCP Criteria Species	Apr-Sept	Chenopod Scrub, Meadows, Playas, Riparian Woodland, Valley and Foothill Grassland	Moderate. Suitable habitat exists.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	3.2 MSHCP Covered Species	Apr-Jun	Chaparral, Coastal Scrub/sandy or rocky openings	Moderate. Suitable habitat exists.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	1B.2 MSHCP Covered Species	April-July	Chaparral, Coastal Scrub, Meadows, Valley and Foothill Grassland/often clay	High. Present within Project Site.
<i>Convolvulus simulans</i>	Small-flowered morning glory	4.2 MSHCP Covered Species	Mar-July	Chaparral (openings), Coastal scrub, Valley and foothill grassland/clay, serpentinite seeps	Moderate. Suitable habitat exists.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	1B.1 FE SE MSHCP Narrow Endemic	Apr-Jun	Chaparral, Cismontane Woodland, Coastal Scrub/(alluvian fan)/sandy	Moderate. Suitable habitat exists.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica Mountains dudleya	1B.2 FT	Mar-Jun	Chaparral, Coastal Scrub	Moderate. Suitable habitat exists.

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.4 Biological Resources

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2 MSHCP Narrow Endemic	Apr-Jul	Chaparral, Coastal Scrub, Valley and Foothill Grassland/often clay	Moderate. Suitable habitat exists.
<i>Dudleya viscida</i>	sticky dudleya	1B.2 MSHCP Covered Species	May-Jun	Coastal Bluff Scrub, Chaparral, Coastal Scrub/rocky	Low. No habitat present
<i>Erodium macrophyllum</i>	round-leaved filaree	2.1 MSHCP Criteria Species	Mar-May	Cismontane Woodland, Valley and Foothill Grassland/clay	Moderate. Suitable habitat exists.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	1B.1 FE SE MSHCP Covered Species	Apr-Jun	Coastal Scrub, Valley and Foothill Grassland, Vernal Pools/mesic	Low. No habitat present
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	4.2 MSHCP Covered Species	Mar-May	Chaparral, Coastal Scrub Valley and foothill grassland/clay	High. Present within general vicinity.
<i>Hordeum intercedens</i>	vernal barley	3.2 MSHCP Covered Species	Mar-Jun	Coastal Dunes, Coastal Scrub, Valley and Foothill Grassland, Vernal Pools	Moderate. Suitable habitat exists.
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	mesa horkelia	1B.1	Feb-Sept	Chaparral, Cismontane Woodland, Coastal Scrub/sand, gravelly	Moderate. Suitable habitat exists.

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1 MSHCP Criteria Species	Feb-Jun	Marsh and Swamp (coastal salt), Playas, Vernal Pools	High. Present within general vicinity.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	1B.2 MSHCP Covered Species	Jan-July	Chaparral, Coastal Scrub	Moderate. Suitable habitat exists.
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	1B.3 MSHCP Covered Species	Jun-Aug	Broad leaved upland Forest, Chaparral, Cismontane Woodland, Lower Montane Coniferous Forest, Valley and Foothill Grassland	Low. No habitat present
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	3.1 MSHCP Criteria Species	Mar-Jun	Valley and Foothill Grassland, Vernal Pools(alkaline)	Moderate. Suitable habitat exists.
<i>Navarretia fossalis</i>	spreading navarretia	1B.1/FT MSHCP Narrow Endemic	Apr-Jun	Chenopod Scrub, Marsh and Swamp(assorted shallow freshH2O), Playas, Vernal Pools	Moderate. Suitable habitat exists.
<i>Navarretia prostrata</i>	prostrate navarretia	1B.1 MSHCP Criteria Species	Apr-July	Coastal Scrub, Meadows, Valley and Foothill Grassland (alkaline), Vernal Pools/mesic	Moderate. Mesic alkaline soils present within general vicinity.
<i>Nolina cismontana</i>	chaparral nolina	1B.2	May-July	Chaparral, Coastal Scrub/sandstone or gabbro	Moderate. Suitable habitat exists.
<i>Satureja chandleri</i>	San Miguel savory	1B.2 MSHCP Narrow Endemic	Mar-Jul	Chaparral, Cismontane Woodland, Coastal Scrub, Riparian Woodland, Valley and Foothill Grassland/rocky, gabbroic or metavolcanic	Moderate. Suitable habitat exists.

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.4 Biological Resources

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<i>Senecio aphanactis</i>	rayless ragwort	2.2	Jan-Apr	Chaparral, Cismontane Woodland, Coastal Scrub/alkaline	Moderate. Suitable habitat exists.
<i>Sibaropsis hammittii</i>	Hammitt's clay-cress	1B.2	Mar-Apr	Chaparral, Valley and Foothill Grassland	Low. No habitat present.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	2.2 MSHCP Covered Species	Mar-Jun	Chaparral, Coastal Scrub, Lower Montane Coniferous Forest, Mojave Desert Scrub, Playas/alkaline, mesic	High. Alkaline soils within the general vicinity
<i>Sphaerocarpos drewei</i>	bottle liverwort	1B.1	n/a	Chaparral, Coastal Scrub/opening, soil	Moderate. Suitable habitat exists.
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	1B.2	Jul-Nov	Cismontane Woodland, Coastal Scrub, Lower Montane Coniferous Forest, Meadows, Marsh and Swamp, Valley and Foothill Grassland(vernally mesic)/near ditches, streams, springs	Moderate. Suitable habitat exists.
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	1B.2 MSHCP Covered Species	Apr-May	Chaparral, Coastal Scrub	Moderate. Suitable habitat exists.
<i>Tortula californica</i>	Californica screw moss	1B.2	n/a	Chenopod Scrub, Valley and Foothill Grassland/ sandy, soil	Low. No habitat present
<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Wright's trichocoronis	1B.1 MSHCP Narrow Endemic	May-Sept	Meadows, Marsh and Swamp Riparian Forest, Vernal Pools/alkaline	High. Alkaline soils within the general vicinity

**Table 4.4-1: Special Status Plant Species Known to Occur or with the Potential to Occur within the Project Area**

Scientific Name	Common Name	Status	Blooming Period	Habitat	Potential to Occur in General Vicinity (High, Moderate, Low)
<b><u>Federal Status</u></b>		<b><u>CNPS Status</u></b>		<b><u>County Status</u></b>	
FE = Federal Endangered		1B= Rare or endangered in California and elsewhere		MSHCP Covered Species = Covered species under County of Riverside Multiple Species Habitat Conservation Plan	
FT = Federal Threatened		2= Rare or endangered in California, but more common elsewhere		MSHCP Narrow Endemic = Listed as a narrow endemic under County of Riverside Multiple Species Habitat Conservation Plan	
<b><u>State/CDFG Status</u></b>		3= Review List-Plant for which we need more information		MSHCP Criteria Species = Species which need to be surveyed for within specific County of Riverside MSHCP Criteria Areas	
SE = State Endangered		4= Plants with limited Distribution- Watch List			
ST = State Threatened		.1= Seriously endangered in California			
		.2= Fairly endangered in California			
		.3= Not very endangered in California			

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.4 Biological Resources

Table 4.4-2: Special Status Wildlife Species Known to Occur or with the Potential to Occur within the Project Area				
Scientific name	Common Name	Status	Habitat	Potential to Occur in General vicinity (High, Moderate, Low)
<b>Invertebrates</b>				
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE, MSHCP Covered Species	Grasslands, sage scrub, chaparral with open areas	Low. Has potential to occur within general vicinity.
<b>Reptiles</b>				
<i>Aspidoscelis (Cnemidophorus) hyperythra beldingi</i>	Orange-throated whiptail	CSC, MSHCP Covered Species	Open sage scrub, chaparral, sandy wash, woodland	High. Has potential to occur within general vicinity.
<i>Aspidoscelis (Cnemidophorus) tigris stejnegeri</i>	Coastal western whiptail	CNDDDB: G5T3T4S2S3, MSHCP Covered Species	Dense chaparral and sage scrub, especially around sandy washes and streambeds	Moderate. Has potential to occur within general vicinity.
<i>Charina (Lichanura) trivirgata roseofusca</i>	Coastal rosy boa	CNDDDB: G4G5S3S4	Dry, rocky brushlands and arid habitats, prefers rock outcrops	Moderate. Has potential to occur within general vicinity.
<i>Crotalus ruber ruber</i>	Northern red diamond rattlesnake	CSC, MSHCP Covered Species	Scrub, chaparral	Low. Has low potential to occur within general vicinity.
<i>Diadophis punctatus modestus</i>	San Bernardino Ringneck Snake	CNDDDB S2	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	Low. Has low potential to occur within general vicinity.
<i>Phrynosoma coronatum (blainvillii)</i>	Coast (San Diego) horned lizard	CSC, MSHCP Covered Species	Sage scrub, chaparral, forests	High. Has potential to occur within general vicinity.
<i>Salvadora hexalepis virgultea</i>	Coast patch-nosed snake	CSC	Open habitats, brush	Moderate. Has potential to occur within general vicinity.
<i>Thamnophis hammondi</i>	Two-striped garter snake	CSC	Creeks and ponds, nearby upland habitats	Low. Has low potential to occur within general vicinity.
<b>Birds</b>				
<i>Accipiter cooperii</i>	Cooper's Hawk	CSC (nesting), MBTA, MSHCP Covered Species	Oak woodland, eucalyptus, mature riparian forest	High. Observed within general vicinity foraging.



Table 4.4-2: Special Status Wildlife Species Known to Occur or with the Potential to Occur within the Project Area

Scientific name	Common Name	Status	Habitat	Potential to Occur in General vicinity (High, Moderate, Low)
<i>Accipiter striatus</i>	Sharp-shinned hawk	CSC, MSHCP Covered Species	Grasslands, coastal sage scrub	Moderate. Has potential to occur within general vicinity as a foraging winter migrant.
<i>Agelaius tricolor</i>	Tricolored blackbird (nesting colony)	FBCC, CSC, MBTA, MSHCP Covered Species	Marshes, fields	Nesting Habitat: absent Foraging Habitat: Low potential.
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	CSC, MBTA, MSHCP Covered Species	Open coastal sage scrub	High-Moderate: Has potential to occur within general vicinity.
<i>Amphispiza belli belli</i>	Bell's sage sparrow	FBCC, CSC, MBTA, MSHCP Covered Species	Coastal sage scrub, chaparral	Moderate. Has potential to forage within general vicinity.
<i>Aquila chrysaetos</i>	Golden eagle	FBCC, BEPA, CSC, CFP, MBTA, MSHCP Covered Species	Grasslands, trees, cliffs, scrub	Low. Has low potential to forage within general vicinity.
<i>Asio otus</i>	Long-eared Owl	FBCC, CSC, MBTA	Nesting in old nests in riparian bottomlands grown to tall willows & cottonwoods; also, belts of live oak paralleling stream courses. Requires adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Moderate. Has potential to forage and nest within general vicinity.
<i>Athene cunicularia</i>	Burrowing Owl	FSC, FBCC, CSC (Burrow sites), MBTA, MSHCP Covered Species	Open land, old ground squirrel burrows	Low. High weedy growth and discing limits potential, but ground squirrel burrows are present.
<i>Circus cyaneus</i>	Northern harrier	CSC (nesting), MBTA, MSHCP Covered Species (breeding)	Grasslands, marshes, open habitats	Low. Has low potential to occur within general vicinity.
<i>Elanus leucurus</i>	White-tailed kite	CFP, MBTA, MSHCP Covered Species	Open habitats with perches	Moderate :Habitat present for foraging within general vicinity. Potential nesting habitat present

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

##### 4.4 Biological Resources

Table 4.4-2: Special Status Wildlife Species Known to Occur or with the Potential to Occur within the Project Area				
Scientific name	Common Name	Status	Habitat	Potential to Occur in General vicinity (High, Moderate, Low)
				in 7 and 9.
<i>Empidonax traillii (extimus)</i>	Willow flycatcher (southwestern)	FE ( <i>extimus</i> ), SE (all subspecies), MBTA, MSHCP Covered Species, but may require surveys ( <i>extimus</i> )	Well developed riparian woodland, willow meadows	Low. Has potential to occur only within general vicinity in 7 and 9. Potential nesting habitat present.
<i>Eremophila alpestris actia</i>	California horned lark	CSC, MBTA, MSHCP Covered Species	Open habitats, bare dirt	Low. Current high weedy growth limits potential.
<i>Icteria virens</i>	Yellow-breasted chat	CSC (nesting), MBTA, MSHCP Covered Species	Mature riparian woodland	Moderate. Has potential to occur within general vicinity.
<i>Lanius ludovicianus</i>	Loggerhead shrike	FBCC, CSC (nesting), MBTA, MSHCP Covered Species	Open habitats, scrub	High. Has potential to occur within general vicinity. Potential nesting habitat present.
<i>Poliophtila californica californica</i>	Coastal California gnatcatcher	FT, CSC, MBTA, MSHCP Covered Species	Coastal sage scrub	High: Potential to nest in general vicinity.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE, SE, MBTA, MSHCP Covered Species but may require surveys	Riparian scrub and low woodland	Moderate. Has potential to occur within general vicinity.
<b>Mammals</b>				
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	ST/FE, MSHCP Covered Species	Grasslands with sparse to no shrub cover	Low. Has low potential to occur within general vicinity.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	CSC, MSHCP Covered Species	Scrub/grassland interface	High. Occurs within general vicinity.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC, MSHCP Covered Species	Cactus thickets, chaparral, sage scrub	Low. Has low potential to occur within general vicinity.

Table 4.4-2: Special Status Wildlife Species Known to Occur or with the Potential to Occur within the Project Area

Scientific name	Common Name	Status	Habitat	Potential to Occur in General vicinity (High, Moderate, Low)
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	CSC, MSHCP Covered Species	Sage scrub, grassland, desert scrub	Moderate. Has potential to occur within general vicinity.
<b><u>Federal Status</u></b> FE = Federal Endangered  FT = Federal Threatened  FBCC= Federal Birds of Conservation Concern  MBTA = Migratory Bird Treaty Act Species  BEPA = Bald and Golden Eagle Protection Act		<b><u>State/CDFG Status</u></b> SE = State Endangered  ST = State Threatened  CFP = California Fully Protected Species  CSC = California Species of Concern  CNDDB = has a California Natural Diversity Database Ranking Only		<b><u>County Status</u></b> MSHCP Covered Species = Covered species under County of Riverside MSHCP

#### **Sensitive Biological Resources Documented in the Proposed Project Site**

This section summarizes sensitive biological resources that were documented on the Proposed Project Site based on field surveys.

##### **Proposed Project Site**

This site is predominately vegetated by approximately 6 acres of nonnative grassland; a small (0.53 acres) portion of disturbed property is located on the northeastern portion of this parcel. Typical nonnative grasses on this property include wild oat (*Avena* spp.), wild barley (*Hordeum murinum*), and soft chess (*Bromus hordeaceus*). There is some remnant coastal sage scrub interspersed within this parcel.

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

A population of long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), a CNPS list 1B.2 species and MSCHP Conservation Species, was identified within the southeastern portion of this property (Figure 4.4.1).

Long-spined spineflower occurs in southwestern California and northwestern Baja California, Mexico, from western Riverside County south, through San Diego County, to the vicinity of Oso Negros, east of Ensenada, Mexico (County of Riverside 2003). This small annual herb belonging to the buckwheat family (Polygonaceae) is typically found on clay lenses, which are largely devoid of shrubs. It can be occasionally seen on the periphery of vernal pool habitat and even on the periphery of montane meadows near vernal seeps. This species occurs from about 328 to 4,600 feet in elevation and blooms from April through July (CNSP 2006). Throughout much of its range, potential habitat for this species is threatened by urban development and competition with non-native grasses (County of Riverside 2003).

The long-spined spineflower has extension regional abundance. About 25 to 35 populations have been reported in the United States. At least 6 populations have been reported from Mexico (County of Riverside 2003). Of the 62 occurrences listed for this species in the CNDDDB, 38 locations are from Riverside County, 22 locations are from San Diego County, one occurrence is from Santa Barbara County and one is from Orange County (CNDDDB 2006). In Riverside County, the largest populations are known from the vicinity of Gavilan Hills, Temescal Canyon area, Lake Mathews-Estelle Mountain Reserve, Hartford Springs Park, and the Motte Reserve. The two largest known populations appear to be at Dorland Mountain and at Woodchuck Road near Agua Tibia Mountain (County of Riverside 2003).

##### ***Special Status Wildlife Species***

No special status wildlife species were observed during field surveys of this parcel. A Cooper's hawk (*Accipiter cooperii*) was observed foraging adjacent to this parcel; however, nesting habitat for this species is not present within this site. In addition, although not observed during field investigations, suitable nesting habitat for burrowing owls does occur within this parcel due to the presence of ground squirrel burrows.

***Riparian/Riverine Habitat***

A drainage occurs within the on the eastern half of this parcel, running the width of the parcel, and exiting near the northeast corner. This drainage is not a jurisdictional wetland due to the lack of wetland characteristics (i.e., wetland vegetation), and will likely need to be addressed during the SWPPP and NPDES permitting process.

**4.4.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS****Federal*****Federal Endangered Species Act***

The Endangered Species Act (7 U.S.C. 136; 16 U.S.C. 460) of 1973 provides for the conservation of plant and animal species that are endangered or threatened with extinction throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. The Endangered Species Act (ESA) forbids federal agencies from authorizing, funding, or carrying out actions that may jeopardize endangered species. The ESA forbids any government agency, corporation, or citizen from taking (i.e. harming, harassing, or killing) endangered animals without a permit. The administering agency for terrestrial and avian species, as well as for non-anadromous freshwater fish, is the US Fish and Wildlife Service (USFWS). Sections 7 and 10 of the Act may require consultation with the USFWS for the protection of such species prior to implementation of the Proposed Project.

***Clean Water Act***

The Clean Water Act regulates restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. The Clean Water Act authorizes the United States Army Corps of Engineers (USACOE) to require that a project obtain a permit if the project falls within the jurisdiction of the Clean Water Act.

***Migratory Bird Treaty Act***

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) or part thereof.

**State*****State of California Endangered Species Act***

The State of California Endangered Species Act (CESA) ensures legal protection for plants and animals listed as rare or endangered. The state also lists "Species of Special Concern" based on limited distribution, declining populations, diminishing habitat, or unusual scientific,

### **4.4 Biological Resources**

recreational, or educational value. Under the law, the California Department of Fish and Game (CDFG) is empowered to review projects for their potential to impact state-listed species and Species of Special Concern and their habitats.

#### ***California Fish and Game Code, Sections 1600-1603***

This statute regulates activities that would “substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed of a natural watercourse” that supports fish or wildlife resources. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. A Streambed Alteration Agreement must be obtained for any Proposed Project that would result in an adverse impact to a river, stream, or lake. If fish or wildlife would be substantially adversely affected, an agreement to implement mitigation measures identified by the CDFG would be required.

#### ***California Fish and Game Code Sections 3503 and 3503.5***

The California Fish and Game Code Section 3503 specifies the following general provision for birds: “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season that results in the incidental loss of fertile eggs or nestlings, or otherwise leads to nest abandonment is considered take. Disturbance that causes nest abandonment and/or loss of reproductive effort is also considered take by CDFG.

#### ***California Fish and Game Code Sections 3511 and 5050***

California Fish and Game Code section 3511 and 5050 prohibits the taking and possession of birds and reptiles listed as “fully protected.” The administering agency is the CDFG.

#### ***CEQA Guidelines Section 15380***

CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria.

### **Regional and Local**

#### ***Native and Heritage Tree Ordinances***

The County of Riverside has several tree protection regulations such as the Riverside County Oak Tree Management Guidelines which regulate the removal of native oak trees (County of Riverside 1993), the County of Riverside, Roadside Tree Ordinance No. 12.08 which regulates the removal of trees within County highway ROWs, and the County of Riverside, Open Space and Conservation Element, 1996, which requires that any future development in an identified

sensitive vegetation area (including oak woodlands) must be evaluated individually and cumulatively for potential impact on vegetation (County of Riverside 1993).

### ***Western Riverside County Multiple Species Habitat Conservation Plan***

The Proposed Project is in the coverage area of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which serves as an HCP pursuant to Section 10(a)(1)(B) of the Endangered Species Act, as well as a National Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP, which was adopted by the County of Riverside on June 17, 2003, is one of several large, multi-jurisdictional habitat conservation planning efforts in Southern California with the overall goal of maintaining biological diversity within a rapidly urbanizing region. The MSHCP will allow Riverside County and participating cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the ESA and CESA.

The MSHCP provides a conservation area for 146 special-status species, including federal and state listed endangered and threatened species, and provides incidental take permits for development projects that impact these covered species.

The MSHCP includes the following requirements:

- Site-specific focused surveys for Narrow Endemic Plant Species and for all public and private projects where appropriate habitat is present
- Surveys for Criteria Area Wildlife Species where suitable habitat is present
- Site surveys of riparian, riverine, and vernal pool resources in order to conserve these resources and the species that use them
- Habitat compensation measures in the event that sensitive habitat is removed or adversely affected during project construction
- Fee payment to the appropriate permit agency when work is conducted within certain jurisdictional areas of the MSHCP

SCE has included sensitive species information from the MSHCP in this document, and is following the intent of the Plan in creation of its Proposed Measures and Mitigation Measures to protect sensitive species and habitat. SCE is a Participating Special Entity under the MSHCP is not required to participate in the plan.

### **4.4.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to biological resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service



### 4.4 Biological Resources

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

#### 4.4.4 IMPACT ANALYSIS

##### 4.4.4.1 Construction Impacts

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

The Proposed Project will not have a substantial adverse effect on any special status species with the implementation of SCE proposed measures.

##### ***Special Status Plants***

A population of long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*) a CNPS list 1B.2 species and MSCHP Conservation Species was identified within the southeastern portion of the Proposed Project Site (Figure 4.4.1). The proposed footprint of the Fogarty substation has been designed to avoid direct grading and construction impacts to the population of long-spined spineflower within this parcel (Figure 4.4.1). However, inadvertent, or accidental impacts to the population could occur during construction. Implementation of SCE Proposed Measures SCE Bio - 1, 3, 8, and 10 and Mitigation Measure BIO – 1 would serve to eliminate the potential for any inadvertent or accidental impacts to this sensitive plant species. Therefore, no significant impacts to long-spined spineflower would occur.

##### ***Special Status Wildlife***

Special-status wildlife species observed during field investigations are limited to Cooper's hawk. However, other Special Status wildlife identified herein with "high potential to occur in the general vicinity" include orange-throated whiptail, coast horned lizard, loggerhead shrike, coastal California gnatcatcher, and San Diego black-tailed jackrabbit. Additional species of Special Status wildlife identified with "moderate potential to occur in the general vicinity" include coastal whiptail, coastal rosy boa, coast patch-nosed snake, sharp-shinned hawk,

southern California rufous-crowned sparrow, Bell's sage sparrow, long-eared owl, white-tailed kite, yellow-breasted chat, least Bell's vireo, northwestern San Diego Pocket mouse. Special status species identified with "low potential to occur in the general vicinity" include Quino checkerspot butterfly, northern red diamond rattlesnake, San Bernardino ringneck snake, two-striped garter snake, tricolored blackbird, golden eagle, burrowing owl, northern harrier, southwestern willow flycatcher, California horned lark, Stephen's kangaroo rat, and San Diego desert woodrat.

Additional Special Status species that are not previously identified herein also have at least some potential to occur in the general vicinity, and these include one amphibian, namely, western spadefoot, three reptiles: San Diego banded gecko, silvery legless lizard, San Diego Mountain kingsnake, and several birds, ferruginous hawk, prairie falcon, merlin, Costa's hummingbird, Nuttall's woodpecker, oak titmouse, California thrasher, yellow warbler, chipping sparrow, black-chinned sparrow, lark sparrow, grasshopper sparrow, and Lawrence's goldfinch. Based upon distributions reported by Zeiner et al. (1990) and some range extensions reported by Constantine (1998), the following Special Status bats are anticipated to occur in the general vicinity: Yuma myotis, long-eared myotis, fringed myotis, long-legged myotis, small-footed myotis, silver-haired bat, red bat, hoary bat, southern yellow bat, spotted bat, pale big-eared bat, pallid bat, pocketed freetailed bat, big freetailed bat, and western mastiff bat. Finally, one additional Special Status rodent, southern grasshopper mouse, and a carnivore, American badger, are also anticipated to occur in the general vicinity,

An indicated potential to occur "in the general vicinity" does not necessarily mean that these special-status species can be expected to occur on the Proposed Project Site. In most cases, these species are probably absent, especially, the mentioned amphibians and reptiles, due to absence of suitable habitat on the site. Several Special-status bird species can reasonably be anticipated to occur, even if only rarely, occasionally, seasonally, or in migration. Some could be year-round resident on the Project site and/or in the immediate surrounding land. This would include Cooper's hawk, white-tailed kite, loggerhead shrike, Costa's hummingbird, Nuttall's woodpecker, oak titmouse, California thrasher, Southern California rufous-crowned sparrow, Bell's sage sparrow, chipping sparrow, black-chinned sparrow, lark sparrow, and Lawrence's goldfinch. Others may be summer resident, such as grasshopper sparrow, but yellow warbler, yellow-breasted chat are unlikely to occur, due to lack of sufficient riparian habitat. Potentially occurring winter residents include northern harrier, sharp-shinned hawk, ferruginous hawk, merlin, and prairie falcon. Opportunities for use of the site by the majority of these Special-status bird species is mainly for foraging. Nesting opportunities in the small cluster of Peruvian peppertrees is probably limited to songbirds such as Costa's hummingbird, Nuttall's woodpecker, oak titmouse, and California thrasher. Birds-of-prey, although they may perch or roost in these trees, probably would not nest there.

Construction-related impacts to Special-status birds could occur. This would involve potential disruption of nesting activity, or destruction of active nests. Such impacts are potentially significant, and would be considered in violation of the California Fish and Game Code Section 3503, a general provision that makes it "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any

regulation made pursuant thereto.” Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season that results in the incidental loss of fertile eggs or nestlings, or otherwise leads to nest abandonment is considered take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered also considered take by CDFG. The potential for this impact to occur during construction would be reduced to less than significant by implementation of Mitigation Measures BIO-5 and 6. Additional Applicant Proposed Measures to reduce the level of this impact to nesting birds include SCE Bio-1, 3, 4, 5, 8, 10, 12, 13, and 14.

The Project site is located within the MSHCP Criteria Area, and the initial assessment by AMEC (2006) determined that “some ground squirrel burrows that could potentially be used by burrowing owls in the future were present.” Therefore, “pre-construction burrowing owl surveys will be needed.” Impacts to burrowing owl, if present during construction would be significant. Implementation of Mitigation Measure BIO-2 would reduce this impact to less than significant.

Listed bird species that are dependent upon well-developed riparian habitat including least Bell’s vireo and southwestern willow flycatcher are unlikely to occur at, or utilize any resources of the site at any time. The limited amount of coastal scrub habitat on the Project site, and dominance of annual grassland probably also precludes the potential for the occurrence of the listed coastal California gnatcatcher. No impacts to listed bird species is expected to occur.

Some Special-status mammal species are anticipated to occur. For bats, their use of the site is likely to be limited to aerial foraging, and perhaps occasional roosting in the peppertrees. Cliffs, caves, mines, buildings, and under bridges preferred for roosting sites by most species are absent. San Diego black-tailed jackrabbit probably frequents the site while foraging, but sufficient shrub cover for reproduction is absent. American badger may also occasionally visit the site in search of prey, but there is no evidence of denning there. These species, if present, would be expected to vacate the site, unharmed, at the onset of any construction activity. Southern grasshopper mouse is probably absent, due to lack of sufficient shrub cover that they prefer. The listed Stephen’s kangaroo rat is not expected to occur on the Project site, due to the history of disturbance. No significant impact to Special-status mammal species is expected to occur.

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

A drainage occurs adjacent to the eastern half of this parcel, running the width of the parcel. This drainage is outside of the substation footprint, and would be completely avoided by direct grading and construction impacts. Incidental or accidental impacts could occur, however, and these are potentially significant. Implementation of Applicant Proposed Measures SCE Bio-1,

2, 3, 4, 6, 7, 8, 9, and 10 and Mitigation Measures BIO-3, and 4 would reduce the level of this potential impact to less than significant.

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

No Federal wetlands defined by Section 404 of the Clean Water Act are present on the Project site, or immediate vicinity, including the aforementioned drainage, which is not a wetland. No construction impacts to federally protected wetlands would occur.

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

The Project site and adjacent areas have not been identified as a corridor for movement or migration of wildlife species. No fishes are present. No impacts associated with interference with the movement of wildlife would occur.

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

Trees present on the Project site are limited to a small cluster of introduced Peruvian peppertrees. The several tree protection regulations in effect in the County of Riverside pertain to native trees, and are therefore inapplicable to the trees on the Project site. No impacts associated with conflicts with local policies or ordinances pertaining to tree preservation would occur.

**Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

The Proposed Project is in the coverage area of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As a public utility provider, SCE operates facilities and/or owns land within the MSHCP area as a Participating Special Entity, and may request take authorization for its activities pursuant to the MSHCP permits. SCE is following the intent of the MSHCP in creation of its Proposed Measures and Mitigation Measures to protect sensitive species and habitat. Therefore, construction of the Proposed Project would not create significant impacts to provisions of an adopted HCP.

#### **Applicant Proposed Measures**

**BIO-SCE-1:** A qualified biologist will conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of applicable environmental regulations, the

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### 4.4 *Biological Resources*

need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project Site boundaries within which the Project activities must be accomplished.

**BIO-SCE-2:** Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

**BIO-SCE-3:** The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.

**BIO-SCE-4:** Projects should be designed to avoid the placement of equipment and personnel within stream channels or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.

**BIO-SCE-5:** Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season special-status avian species if found to be present.

**BIO-SCE-6:** Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

**BIO-SCE-7:** Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

**BIO-SCE-8:** A qualified biologist shall monitor grading and soil movement activities for the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.

- BIO-SCE-9:** The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- BIO-SCE-10:** Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the Proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
- BIO-SCE-11:** The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.
- BIO-SCE-12:** All subtransmission poles would be designed to be raptor-safe in accordance with the Suggested Practices for Raptors on Power Lines: State of the Art in 1996 (Avian Power Line Interaction Committee 1996).
- BIO-SCE-13:** Prior to installation of the poles, a survey would be conducted to locate any raptor or raven nests occurring on the existing poles. If nests are found on poles planned for replacement or modification, SCE would suspend work until the nests are inactive.
- BIO-SCE-14:** Construction work plans/schedules will be designed to minimize construction-related noise in sensitive areas when feasible. In addition, all construction equipment will maintain functional exhaust/muffler systems and idling of motors, except as necessary (e.g., concrete mixing trucks), shall be limited.

### Mitigation Measures

- BIO – 1** The limits of the long-spined spineflower population will be flagged or otherwise marked to ensure construction crews will avoid direct or indirect impacts to the population. Construction personnel shall be instructed to avoid intrusion beyond these marked areas.

The known locations of special-status plant populations that might be found prior to or during the construction period will be monitored, using a trained professional botanist. Monitoring will occur during ground disturbing construction activity in the vicinity of the special-status plant populations to assure the effectiveness of protection measures.



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### 4.4 Biological Resources

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If impacts to the known location of the long-spined spineflower are unavoidable, seeds will be collected and the topsoil may be salvaged and stockpiled in identified upland work areas. After construction is complete, the salvaged topsoil will be spread over the disturbed area of the original population. Once the salvaged topsoil has been spread the seeds of the long-spined spineflower collected prior to construction will be spread throughout the original population location. Seeds will be collected during June prior to construction once the spineflower has senesced.

**BIO – 2** If breeding burrowing owls are found during the pre-construction surveys, the burrows will be flagged and an appropriate construction buffer will be established to avoid direct and indirect impacts to active nests. If the appropriate buffer can not be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, the California Department of Fish and Game will be contacted by the SCE biologist to determine relocation protocols and additional mitigation requirements.

**BIO – 3** **Erosion Control:** The BMPs included in the SWPPP will be implemented during construction to minimize impacts associated with erosion. BMPs will include the installation of sediment and erosion control structures to protect biological resources, including streams, as well as roadways and adjacent properties. Watering for dust control during construction will also be employed.

**BIO – 4** **Reducing hydrologic impacts:** Potential hydrologic impacts would be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water.

**BIO – 5** **Noise Control:** If nesting birds protected under federal or state regulations are located within the Project Area, then noise attenuation measures shall be implemented to prevent construction or operational noise from exceeding ambient levels during the nesting period. SCE shall minimize noise through careful work scheduling and having properly functioning mufflers on construction vehicles. In addition, to the extent practicable, no Project vehicles, chain saws, or heavy equipment will be operated within the exclusion zone until the nesting season is over or a qualified biologist has determined that nesting is finished and the young have fledged. If it is not practicable to avoid work within an exclusion zone around an active nest, work activities modified to minimize disturbance of nesting birds may proceed within these zones. If the biologist determines that particular activities pose a high risk of disturbing an active nest, the biologist will recommend additional, feasible measures to minimize the risk of nest disturbance. If work activities are found to result in harm to nesting birds, destruction of an active nest, or nest abandonment prior to fledging, the biologist will report this to the CDFG and USFWS.



**BIO – 6**      **Pre-Construction Nesting Bird Surveys:** To avoid the potential abandonment or removing active nests (with eggs or young) of any special status or non-special-status migratory birds and raptors, SCE will implement one of the following:

- Conduct all construction activity (including vegetation pruning or removal) during the non-breeding season (generally between August 16 and February 28) for most special-status and non-special-status migratory birds
- If construction activities are scheduled to occur during the breeding season (generally between March 1 and August 15), a qualified wildlife biologist will conduct pre-construction focused nesting surveys prior to any ground disturbing activity, tree trimming or vegetation removal activities

#### 4.4.4.2 Operation Impacts

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

##### ***Special Status Plants***

After construction, the population of long-spined spineflower will be located or reestablished outside the substation perimeter wall. Operation impacts might include inadvertent or accidental damage by vehicles. The area might also be cleared of vegetation, or have herbicides applied for fire protection or weed abatement purposes. Additionally, future plans for landscaping could conflict with the long-spined spineflower population. Such impacts would potentially impinge on the specific population, but would not be considered potentially significant to the overall conservation of the species. Implementation of Mitigation Measure BIO-1 and BIO-7 would reduce the level of this potential impact to less than significant.

##### ***Special Status Wildlife***

Construction impacts to special-status wildlife are identified, mainly as those that could occur to nesting birds. However, during the operational phase, the opportunities for nesting birds would be very limited, especially for special-status species. A few common species such as house finch, house sparrow, European starling may still find opportunities to nest in the operational facility, but they are unlikely to be disturbed.

There is the potential for electrocution of birds, including special-status species, during Project operation. These conditions usually result in the mortality of individuals, which could be considered an operation impact. Implementation of Applicant Proposed Measure SCE Bio-12 would reduce the level of this potential impact to less than significant.

**4.4 Biological Resources**

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

A drainage occurs adjacent to the eastern half of this parcel, running the width of the parcel. Incidental or accidental construction impacts could occur. However, no operation impacts would occur.

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

No Federal wetlands defined by Section 404 of the Clean Water Act are present on the Project site, or immediate vicinity, including the aforementioned drainage, which is not a wetland. No operation impacts to federally protected wetlands would occur.

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

The Project site and adjacent areas have not been identified as a corridor for movement or migration of wildlife species. No fishes are present. No interference with the movement of wildlife would occur.

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

The several tree protection regulations in effect in the County of Riverside pertain to native trees. During construction, the introduced Peruvian peppertrees would be removed, and there would be no remaining trees. The substation would not be landscaped immediately following construction. Instead, as the surrounding area develops, a plan for substation landscaping would be prepared and be consistent with community and city standards to the extent that they are not inconsistent with SCE safety standards. No conflicts with local policies or ordinances pertaining to tree preservation would occur.

**Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

Operation of the Proposed Project would not create any impacts to provisions of an adopted HCP.

### Applicant Proposed Measures

SCE would implement standard measures, as discussed above, to reduce potential impacts to biological resources to less than significant levels.

### Mitigation Measures

Implementation of the mitigation measure below would reduce the level of operational impacts to biological resources to less than significant levels.

**BIO – 7      Long-Term Maintenance of Spineflower Habitat:** Potential operation impacts to the location and population of long-spined spineflower have been identified as vehicle trespass, vegetation clearance or herbicide application, and conflicts with future landscape plans. The following elements will be implemented to reduce impacts to the long-spined spineflower population:

- Protection from vehicular trespass for the population
- Restrictions upon, or conditions under which vegetation clearance or herbicide application could occur
- Integration with future landscape plans for the facility

## 4.4.5 ALTERNATIVES

### Alternative Project Site B

This parcel is predominantly vegetated by disturbed and developed property (2.5 acres), nonnative grassland (1.7 acres), and disturbed (1.58 acres) and undisturbed (0.34 acre) coastal sage scrub habitat. Portions of this site, which are associated with a previous residence, have been partially cleared, and many ornamental plants still exist along the margins of the cleared portions of the property.

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

Palmer's grapplinghook, a CNPS list 4.2 species and MSHCP Conservation Species was identified within the southern portion of this site.

**Palmer's grapplinghook** is a perennial herb in the borage family (Boraginaceae) that is known to occur in the cismontane region of Los Angeles County, Orange County, Riverside County, San Diego County, Santa Catalina Island, Arizona and Baja California, Mexico, at elevations between 15 and 830 m (49 to 2723 ft). The flowers of this species are minute (2mm long) and white and bloom from March through April (Hickman 1993, CNPS 2006).

Palmer's grapplinghook is associated with clay and cobbly clay soils in open coastal sage scrub, chaparral, valley and foothill grasslands, coastal scrub and oak woodland (County of Riverside 2003). In Riverside County, it is commonly associated with Munz's onion (*Allium munzii*), many-stemmed dudleya (*Dudleya multicaulis*) and occasionally with Nevin's barberry (*Berberis nevinii*) (County of Riverside 2003). Palmer's grapplinghook is threatened by urban

##### 4.4 Biological Resources

development and agriculture conversion (Reiser 1996), clay mining, fire-suppression activities (discing), grazing, and competition with invasive non-natives (CNDDDB 2000).

##### **Special Status Wildlife Species**

No special status wildlife species were observed during field investigations of this site. However, suitable habitat for the following species occurs within this parcel:

- Bell's sage sparrow (*Amphispiza belli belli*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Orange-throated whiptail (*Aspidoscelis [Cnemidophorus] hyperythra beldingi*)
- Coast (San Diego) horned lizard (*Phrynosoma coronatum [blainvillei]*)
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*)
- Northern red diamond rattlesnake (*Crotalus ruber ruber*)
- Northwestern San Diego pocket mouse (*Perognathus [Chaetodipus] fallax fallax*)
- Coastal western whiptail (*Aspidoscelis [Cnemidophorus] tigris stejnegeri*)
- San Bernardino Ringneck Snake (*Diadophis punctatus modestus*)
- San Diego black-tailed jackrabbit (*Lepus californica bennetti*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)

##### **Riparian/Riverine Habitat**

No riparian/riverine, vernal pool, or other wet habitats that may have oversight by the CDFG and USACE were identified within this parcel.

##### **Summary of Impacts**

With respect to impacts to biological resources, the Proposed Project, and Alternative B involve similar impacts to Special-status wildlife species, and all would require performance of pre-construction surveys for burrowing owl. However, because of the presence of Coastal Scrub on Alternative B, additional Special-status wildlife species, including some reptiles and birds not expected to occur on the Proposed Project could be adversely affected.

The identified Special-status plant on Alternative B (Palmer's grappling hook) is a lesser threatened or endangered species (CNPS List 4) than is the long-spined spineflower occurring on the Proposed Project site (CNPS List 1B). Nonetheless, all identified impacts to biological resources can be mitigated to less than significant by implementation of the appropriate Applicant Proposed and Mitigation Measures specified for the Proposed Project.

**Alternative Project Site C**

This site is vegetated entirely by nonnative grassland dominated by wild oat and barley. Clay soils are evident within this site through the presence of splendid mariposa lily (*Calochortus splendens*) a species which is commonly found in this soil type. This property appears to have been historically used for row crops on its southern half, and for pasture on its northern half.

***Special-status Plant Species***

No special status plant species were identified within this property during field investigations, therefore, Project implementation would not impact these species, and no mitigation would be required.

***Special Status Wildlife Species***

No special status wildlife species were identified during field investigations of this parcel. This entire parcel is occupied by nonnative grassland that is regularly disced. This parcel does not provide essential habitat for any special-status species other than the burrowing owl.

***Riparian/Riverine Habitat***

No riparian/riverine, vernal pool, or other wet habitats of special concern were identified on this property.

***Summary of Impacts***

With respect to impacts to biological resources, the Proposed Project, and Alternative C involve similar impacts to Special-status wildlife species, and all would require performance of pre-construction surveys for burrowing owl. Special-status plants are absent from Alternative C. From this standpoint, impacts to Special-status plants would be less than impacts identified for the Proposed Project. Nonetheless, all identified impacts to biological resources can be mitigated to less than significant by implementation of the appropriate Applicant Proposed and Mitigation Measures specified for the Proposed Project.

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##### 4.4 *Biological Resources*

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## 4.5 Cultural Resources

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This section summarizes the archaeological and historical settings of the Project Area, including the methods used for record and archival searches, archaeological surveys, and the paleontological review, and the results for the Proposed Project Site and the two Alternative Sites. This section also includes the results of Native American consultation and paleontological resource sensitivity, potential impacts, proposed mitigation measures, and alternatives.

Cultural resources consist of the material remains, environmental data, cultural traditions, and traditional places created by a past culture. These remains can include artifacts, ecofacts, architecture, human remains, and landscapes that are historically or archeologically significant. Historical resources may include buildings, structures, objects, sites, areas, and places, which are historically or archaeologically significant.

Paleontology is the study of pre-Holocene (greater than 10,000 years before the present) remains of plants and animals typically preserved as fossils. Paleontological resources, which are defined as the fossilized remains of prehistoric plants and animals, are non-renewable resources that may include fossilized bones, teeth, shells, tracks, trails, and casts.

### 4.5.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Regional Overview**

##### ***Prehistoric Period***

William Wallace (1955) and Claude Warren (1968) proposed the two most frequently cited prehistoric culture chronologies for Southern California. They emphasized past life-ways, protohistoric, and historical interpretations to establish a chronology of coastal occupation by Native American groups based on specific tool assemblages catering to different resource bases.

The accepted chronology for Southern California prehistoric times as proposed by William Wallace (1955) and Claude Warren (1968) is as follows:

- Early Man Horizon: Predating 6000 BC; is characterized by the presence of large projectile points and scrapers, suggesting a reliance on hunting rather than gathering.
- Milling Stone Horizon: 6000 BC to 1000 BC; characterized by the presence of handstones, milling stones, choppers, and scraper planes; tools associated with seed gathering and shell fish processing with limited hunting activities; evidence of a major shift in the exploitation of natural resources.
- Intermediate Horizon: 1000 BC to 750 AD; reflects the transitional period between the Milling Stone and the Late Prehistoric Horizons; little is known of this time period, but evidence suggests interactions with outside groups and a shift in material culture reflecting this contact.



- Late Prehistoric Horizon: 750 AD to European contact; characterized by the presence of small projectile points; use of the bow and arrow; steatite containers and trade items, asphaltum; cremations; gravegoods; mortars and pestles; and bedrock mortars.

##### ***Ethnohistorical Period (A.D. 1750–1850)***

At the time of Spanish contact, the Temescal Canyon area and uplands to the east were occupied by several autonomous lineages of Luiseño Indians who had divided the valley and surrounding hillsides into tracts of land identified with specific village territories (Bean and Shipek 1978; Dubois 1908; Kroeber 1907, 1908; Phillips 1975; Shipek 1977; Sparkman 1908; Strong 1929). It is presumed that the Luiseño are the descendants of the late prehistoric peoples who occupied the area and represent one linguistic group of the Takic (Shoshonean) speakers who are postulated to have entered the area from the Great Basin at least 1200 years ago. The term Luiseño has historical origins that indicate they came within the jurisdiction of Mission San Luis Rey, founded in 1798. The native peoples in the area around Mission San Juan Capistrano, who were known historically as the Juaneño, spoke a dialect of the same language. Although they did not consider themselves as a unified group, the aboriginal inhabitants of the region recognized a common ancestry, language, tradition, cosmology, and lifeway. They were also related by culture, exchange, and linguistic affinity to the Gabrielino, Serrano, Cahuilla, and Cupeño who together form the historically recognized divisions of the “Shoshonean wedge,” thought to have moved into southern California from the deserts. These groups cannot be equated with tribal structure or political boundaries. Specific dialectical differences, histories, and specific ecological niches serve best to differentiate among groups and sub-groups within each designation. The village, usually represented by a dispersed *ranchería* with seasonally occupied temporary camps and territorially ascribed resource collection areas, comprises the basic Luiseño sociopolitical unit.

The Luiseño were culturally similar to other Takic-speaking tribes, but possessed a more rigid social structure and greater population density. A complicated system of social status, well-defined ruling families that linked *rancherías* within tribal territories, a sophisticated philosophical system associated with *tolache* rituals, and elaborate ritual paraphernalia, including sand paintings, are features that reflect the social structure and dense population of the Luiseño (Bean and Shipek 1978:550). Strong (1929) suggested that social organization was more complex among the populous coastal villages, and less so among smaller valley settlements. Exploitation of resource areas was strictly controlled by ownership of resource territories along family, lineage, and village lines. Sedentary villages were located in diverse ecological zones. Luiseño subsistence was also mixed, but acorns were the primary food resource. Villages appear to have been located near the necessary water sources for acorn leaching.

##### ***Historical Period***

The historical period in western Riverside County can be divided into three distinct periods: the Spanish Mission period, the Mexican Rancho period, and the American period.

The Spanish Mission period in Riverside County can be defined by the Spanish exploration of the area beginning in 1769 and the establishment of the San Diego Presidio and the Missions San Diego, San Luis Rey, and San Juan Capistrano. However, the inland area remained

relatively unexplored as the Spaniards clung to the coast near their missions and presidios. Juan Bautista de Anza first explored the area in 1774 when his expedition camped along the San Jacinto Valley. The County's first European resident, Leandro Serrano, obtained permission from the padres at Mission San Luis Rey to take five leagues of land in Temescal Valley in 1818. His proven ability with the Christianized native population during his service as majordomo at the mission made him a logical choice for settling the valley and securing the territory north of the mission against the Luiseños and Cupeño.

In 1821, Mexico successfully fought for independence from Spain. With Mexico's independence and the establishment of Serrano's Rancho, the Mexican Rancho period (1821-1948) started (Gunther 1984). The Mexican Rancho period was a lively and colorful period of California history. The Mexican Rancho period ended in 1848 as the Mexican War came to a close. After Mexico was defeated and the Treaty of Guadalupe Hidalgo was signed in 1848, California was ceded to the United States, beginning the American Period (1848–present).

Agriculture and mineral extraction continue to play a vital role in the region's economy, although the boom era of the 1880s has yet to be surpassed in industrial growth. The two main historic themes: rural settlement; and commercial, industrial, and agricultural development; continue to influence western Riverside County and constitute the contexts by which historical resources within the Area of Potential Effect (APE)<sup>1</sup> can be interpreted and evaluated.

The Proposed Project Site is centered in an area historically known as Terra Cotta. Terra Cotta had its beginnings in the great California land boom of the 1880s, when the first vein of coal in Southern California was discovered on the rancho owned by Madison and Esther Chaney in the summer of 1883. The discovery of the coal vein resulted in a large number of land purchases by people that wanted to invest in the coal industry. This led to the establishment of several mines and the establishment of the Terra Cotta City and Lucerne townsites (Lech 2004). John D. Hoff discovered another coal vein and clay deposits in the vicinity of the Chaney's property, establishing Terra Cotta Manufacturing Plant, which processed nearly 200 tons of coal and clay per day. In 1887 the Terra Cotta City Post Office was established and the town grew to a 25-block town with the Terra Cotta Manufacturing Plant, John Hoff Asbestos Company, Los Angeles Pressed Brick Company, hotels, and residential houses. Terra Cotta City was purchased by the Elsinore Coal and Clay Company around 1893. In 1896 a spur track was built from the depot at the east end of the Lake Elsinore to Alberhill. This spur passed directly by the Terra Cotta plant and a siding for loading was constructed. The railroad, which became part of the Santa Fe line, served as a stub line to Terra Cotta and Alberhill for the next 30 years.

At its peak in 1906, two hundred residents lived in 25 houses in Terra Cotta. The coal mine continued to operate until 1940 when Pacific Clay Products, the final owner of the plant, finally abandoned Terra Cotta in favor of Alberhill. Charles McClintock, the superintendent of the mine from 1912 to 1940, and his wife were the last to leave Terra Cotta City. They left their home,

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<sup>1</sup> The Area of Potential Effect is the area subject to ground-disturbing activities. The APE, according to federal regulations, is a term used to evaluate cultural resource areas in order to carefully establish an impact area for the project undertaking.

located at the intersection of Terra Cotta Road and Coal Street, in 1951. Since 1972 the area has been known as the city of Lake Elsinore.

### **Methodology**

#### ***Record and Archival Searches***

Prior to fieldwork, a record and information search was conducted on July 12, 2005 at the California Historical Resources Information System (CHRIS) Eastern Information Center (EIC), University of California, Riverside for known cultural resources within one-mile radius of the Project Area. The records search included reviews of the EIC database of archaeological sites and reports; the National Register of Historic Places (NRHP) and the Directory of Archaeological Determinations of Eligibility for California; the California Register of Historic Resources (CRHR), California Historical Landmarks, and Points of Historical Interest; the California Inventory of Historic Resources; and the Historic Property Data File for Riverside County. The record search also included the review of the 1901 Elsinore, California, 30-minute USGS Quadrangle.

An archival and literature review was conducted as background research to document the current knowledge concerning prehistory and history of the local area. Archival research is a particularly important part of the research strategies for the historical-period resources. Archives visited included the Map Collection at the University of California, Riverside, to review General Land Office Plat maps and historical USGS topographic quadrangle maps; Los Angeles Public Library to review the Sanborn Insurance Maps; the Riverside County Library, Elsinore Branch Library, Riverside Local History Resources Center, and the Riverside Public Library to review local history files including topographic maps, photographs, and local history articles.

#### ***Paleontology***

A review of the Regional Paleontological Locality Inventory (RPLI) files at the San Bernardino County Museum was completed to evaluate the potential paleontological sensitivity and impacts of the Proposed Project Site and the two Alternative Sites for the Fogarty Substation.

#### ***Field Survey***

Archaeological field surveys of the Proposed Project Site and the two Alternative Sites were conducted on July 19-20, 2005, and September 7, 2005. The survey of the APE within each parcel consisted of intensive coverage using 20-m transect intervals.

### **Results**

#### ***Record and Archival Searches***

No prehistoric or historic cultural resources have been previously recorded within the Proposed Project Site. However, there are two recorded sites located within one-half mile of the Project Site. Site CA-RIV-5784H is a foundation and associated features from a house shown on the topographic map dated 1953 and site CA-RIV-3832H is an abandoned railroad grade originally constructed by the Atchison, Topeka & Santa Fe Railway in 1896 and taken out of service in the early 1980s.

***Paleontology***

The Proposed Project Site is located on surface exposure of the fossiliferous Silverado Formation, which dates to the Paleocene Epoch, and is overlain by a thin sedimentary veneer of Holocene alluvium. The Silverado Formation has a high potential to contain significant paleontological resources and is assigned high paleontological sensitivity. The Silverado Formation contains coal seams, lignite beds and commercial clay deposits, as well as abundant fossil mollusks and vertebrate fossils.

***Field Survey***

An archaeological field study of the Proposed Project Site was conducted on September 7, 2005. No surface evidence of cultural resources was found on the site.

***Native American Consultation***

A letter was sent to the Native American Heritage Commission (NAHC) on September 22, 2006. The letter described the Proposed Project and requested a review of the Sacred Lands Inventory for the areas within and adjacent to the project site. The letter also requested a list of interested Native American tribes, groups, and individuals for the Project Area,

Dave Singleton, Program Analyst for the NAHC, responded on September 27, 2006, with a letter that indicated no Native American cultural resources were recorded in the NAHC sacred lands file. He enclosed a list 7 California Native American tribes, organizations, and individuals who may have knowledge of cultural resources in the Project Area.

**4.5.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS****Federal**

All lands that are administered by federal agencies are subject to Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires agencies to consider the effects of projects on significant historic resources that are included in or eligible for listing in the National Register of Historic Properties (NRHP). Historic resources include those dating to the prehistoric or historical period and can range from Native American archaeological sites to historically significant buildings that are 50 years old or older. Cultural resources are evaluated for significance with reference to their eligibility for listing in the NRHP, according to criteria published in Title 36, Part 60.4 of the Code of Federal Regulations (36 CFR 60.4).

**State**

Cultural resources as defined in CEQA include prehistoric and historic era archaeological sites, districts, and objects; historic buildings, structures, objects and districts; and traditional/cultural sites or the locations of important historic events. CEQA Guidelines (Section 15064.5) state that a project may have a significant environmental effect if it causes a substantial adverse change in the significance of an historic resource. Additionally, the CPUC must consider properties eligible for listing on the California Register of Historical Resources (CRHR) or that are defined as a unique archaeological resource in CEQA Section 21083.2.

#### **Regional and Local**

The Riverside County General Plan Section 6.1.3 states that CEQA guidelines for cultural resources should be followed when within the County of Riverside and each of the 14 cities. Additionally, Multiple Species Habitat Conservation Plan (MSHCP) Conservation Areas have been created in order to protect significant archaeological resources and other environmental factors. Within the MSHCP Conservation Areas no new large development is permitted to prevent environmental effects.

#### **4.5.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to cultural and paleontological resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries

#### **4.5.4 IMPACT ANALYSIS**

##### **4.5.4.1 Construction Impacts**

**Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

The Proposed Project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. Construction of the proposed Fogarty Substation would have no impact of cultural resources. No prehistoric or historical-period cultural resources were observed during the field survey of the Proposed Project Site. The record search showed there are no previously recorded sites within the Proposed Project Site. Construction of the Proposed Project would not result in any impacts to historical resources.

**Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

The Proposed Project would not cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5. As stated above, no prehistoric or historical-period cultural resources were observed during the field survey of the Proposed Project Site and the records search showed there are no previously recorded sites within the Proposed Project Site. In the event that a previously unknown resource is discovered during construction, the Project would implement applicant proposed measure CULT-SCE-1 to

assess the resource and recommend further action if necessary. Therefore, construction of the Proposed Project would not result in any impacts to archaeological resources.

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

Construction of the Proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The Proposed Project Site is located on surface exposures of the fossiliferous Silverado Formation, which dated to the Paleocene Epoch, and is overlain by a thin sedimentary veneer of Holocene alluvium. Although Holocene surface sediments in the Project Area have low paleontological sensitivity, the Silverado Formation has a high potential to contain significant paleontological resources and is assigned high paleontological sensitivity. Due to the high paleontological sensitivity of the area, ground disturbing construction activities have the potential to unearth a unique paleontological resource, the destruction of which would be a significant adverse impact. Project implementation of mitigation measure **CULT-1** would reduce impacts to less than significant levels.

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

There are no historically recorded cemeteries located within the Proposed Project Site. No impact to human remains or archeological resources is anticipated. Incorporation of applicant proposed measure **CULT-SCE-2** would ensure impacts to archeological resources or human remains, if encountered during construction, are less than significant.

**Applicant Proposed Measures**

- CULT-SCE-1** If previously unidentified archaeological resources are unearthed during construction activities, construction would be halted in that area and directed away from the discovery until a qualified archaeologist assesses the significance of the resource. The archaeologist would recommend appropriate measures to record, preserve or recover the resources.
- CULT-SCE-2** If human remains are encountered during construction or any other phase of development, work in the area of the discovery must be halted in that area and directed away from the discovery. 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 Native American Heritage Commission (NAHC) would be notified within 24 hours as required by Public Resources Code 5097. The 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 treatment of remains.



### **Mitigation Measures**

**CULT-1** Paleontological monitoring shall occur while conducting any ground disturbing activities, including but not limited to grading, trenching, and tunneling, on the Project Site. The paleontological monitor shall have the authority to halt any activities adversely impacting potentially significant resources, and said resources must be recovered, analyzed, and curated with an appropriate repository.

#### **4.5.4.2 Operation Impacts**

##### **Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

Operation of the Proposed Project would not cause a substantial adverse change in the significance of an historical resource as defined in §15064.5. No prehistoric or historical-period cultural resources were observed during the field survey of the Proposed Project Site. The record search showed there are no previously recorded sites within the Proposed Project Site. Operation of the Proposed Project would not result in any impacts to historical resources.

##### **Would the project cause a substantial adverse change in the significant of an archaeological resource pursuant to Section 15064.5?**

Operation of the Proposed Project would not cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5. As stated above, no prehistoric or historical-period cultural resources were observed during the field survey of the Proposed Project Site and the records search showed there are no previously recorded sites within the Proposed Project Site. Therefore, operation of the Proposed Project would not result in any impacts to archaeological resources.

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

Operation of the Proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The Proposed Project Site is located on surface exposures of the fossiliferous Silverado Formation, which dated to the Paleocene Epoch, and is overlain by a thin sedimentary veneer of Holocene alluvium. Although Holocene surface sediments in the Project Area have low paleontological sensitivity, the Silverado Formation has a high potential to contain significant paleontological resources and is assigned high paleontological sensitivity. However, once in operation the Proposed Project includes no ground disturbing activities that could result in exposure of a unique paleontological resource. Operation of the Proposed Project would result in no impacts to unique paleontological resources or unique geologic features.



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

Operation of the Proposed Project would not disturb any human remains, including those interred outside of formal cemeteries. There are no historically recorded cemeteries located within the Project Site. Additionally, once in operation, the Proposed Project includes no ground disturbing activities that could result in exposure of human remains. Operation of the Fogarty Substation would have no impact on human remains.

**Applicant Proposed Measures**

Because operation of the Proposed Project would result in less than significant impacts to cultural resources, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation of the Proposed Project would result in less than significant impacts to cultural resources, no mitigation measures are required.

**4.5.5 ALTERNATIVES****Alternative Project Site B**

Alternative B is located directly across Terra Cotta Road, west of the Proposed Project Site. There is one previously recorded site, CA-RIV-5784H, in the Alternative B Project Site (Love 1995). During a field survey it was noted that the recorded site had been relocated in the southeastern corner of Alternative Project Site B. Site CA-RIV-5784H is a foundation and associated features from a house shown on the topographic map dated 1953. Dates of 1924, 1941, and 1957 are inscribed in concrete at various locations on the site. It is in poor condition and lacks integrity. CA-RIV-5784H has been evaluated in earlier studies as not eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR). Based on the current condition of the recorded site, the previous evaluation and recommendation of the site not being eligible for the NRHP and CRHR is still valid. If Alternative Project Site B is chosen as the location for the Fogarty Substation, SCE will avoid significantly impacting CA-RIV-5784H during construction by avoiding the site and having an archaeological monitor present during any ground disturbing activities. If additional features associated with the site are uncovered during construction, the monitor will have the authority to halt any activities until it can be determined if the feature should be recorded, preserved, or recovered.

Alternative Project Site B is located on surface exposures of the Silverado Formation, a formation that has a high potential to contain significant paleontological resources and is considered a highly paleontologically sensitive formation. The Silverado Formation contains coal seams, lignite beds and commercial clay deposits, as well as abundant fossil mollusks and vertebrate fossils. Therefore, construction activities that disturb the Silverado Formation have the potential to adversely impact significant nonrenewable paleontological resources. Implementation of the applicant proposed measure identified above would reduce potential impacts to less than significant levels.

### **Alternative Project Site C**

Alternative Project Site C is located to the southeast of Pierce Street, to the east of the Proposed Project Site. The record search showed there are no previously recorded cultural resources located on Alternative Project Site C, and no new resources were observed during the field survey conducted on July 19-20, 2005. As such, if Alternative Project Site C is selected, no cultural resources will be impacted during the construction of the Proposed Project.

Alternative Project Site C is located on surface exposures of the Silverado Formation, a formation that has a high potential to contain significant paleontological resources and is considered a highly paleontologically sensitive formation. The Silverado Formation contains coal seams, lignite beds and commercial clay deposits, as well as abundant fossil mollusks and vertebrate fossils. Therefore, construction activities that disturb the Silverado Formation have the potential to adversely impact significant nonrenewable paleontological resources. Implementation of the applicant proposed measure identified above would reduce potential impacts to less than significant levels.

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## 4.6 Geology and Soils

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### 4.6.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Topography and Geomorphology**

The Proposed Project Site is located in the City of Lake Elsinore, western Riverside County, California. Elevations in the vicinity of the Project Area range from approximately 1,260 feet along the edge of Lake Elsinore to approximately 1,836 feet in the low hills just west of the Proposed Project Site (**Figure 4.6-1, Location and Topography**). The City of Lake Elsinore is located within “Elsinore Valley,” the northwestern extension of Temecula Valley and a part of the Elsinore Trough (a structural depression), which is east of the Santa Ana Mountains. This is within the north-central Peninsular Ranges Geomorphic Province.

The steep and rugged Santa Ana Mountains at the western boundary of the Elsinore Trough are represented by the lower Elsinore Mountains just south of Lake Elsinore. Lake Elsinore is a natural lake fed by the San Jacinto River and is located 1.5-miles south of the Proposed Project Site. The surface topography within the Elsinore Trough slopes toward the lake with the southeastern drainage divide into neighboring Temecula Valley about one mile to the southeast of the lake and the northern drainage divide leading to Temescal Wash on the north is between the lake and the Proposed Project Site. The basic geomorphic character of the local area is controlled by active and potentially active faults within the overall Elsinore fault zone. The geomorphic types in the area include: (1) more recent alluvial fans and flood plains associated with local drainages from the north, south, and west; (2) eroded older alluvial fan remnants that form lower subdued surfaces between the local drainages; (3) eroded bedrock formations forming high relief surfaces; and (4) remnant lake deposits bordering the northern, western, and eastern edges of Lake Elsinore.

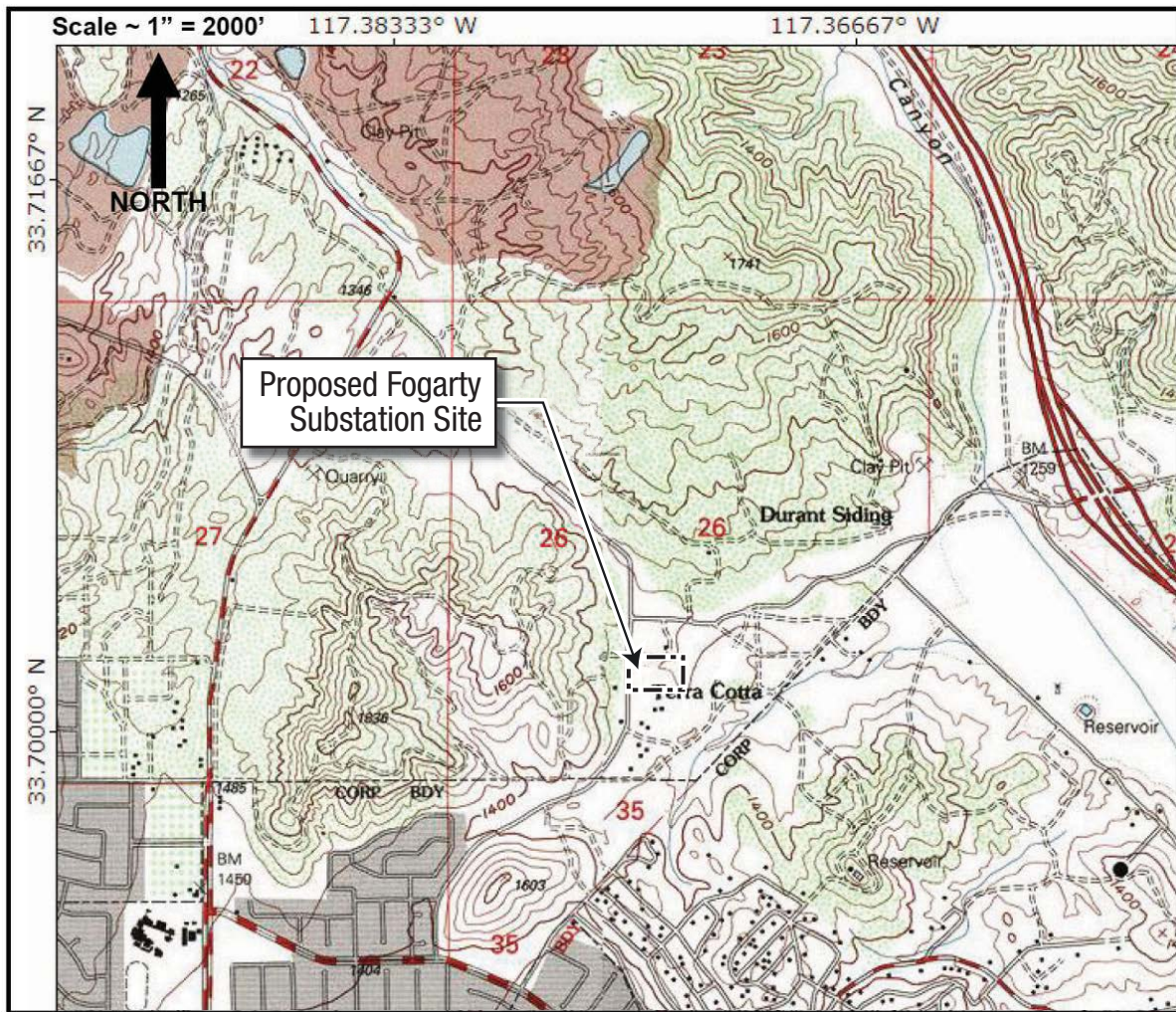
#### **Geology and Soil Units**

The Proposed Project Site lies within a recent alluvial valley (**Figure 4.6-2, Geology and Local Faults**) in an area where eroded older alluvial fan (symbol Qoa) and soft bedrock formations (Silverado Formation (symbol Tsi)) meet. The soils present at the site are associated with either (1) the weathering of the Silverado Formation and the older alluvium, or (2) the deposition of alluvial materials in the recent drainages are predominantly derived from granitic rocks in the Santa Ana Mountains to the west (**Figure 4.6-3, Soil Units**). Soils derived from the Silverado Formation include the Altamont [AbF] soils and the Ramona [RaB2] soils, together covering approximately two-thirds of the Project Area. Soils derived from the weathering of the Santa Ana Mountains include the Placentia [PID], which covers approximately one-third of the Project Area (UC Davis Soil Resource Lab, 2006).

Altamont soils formed in material weathered from fine-grained sandstone and shale; the clay content can be between 35 and 60 percent. The Altamont soils are present on gently sloping to very steep uplands, are well drained, have medium to very high runoff, the permeability is slow, and likely have a high shrink-swell potential. Ramona

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Source: USGS, 1997

Revision date: February 14, 2007

FOGARTY SUBSTATION – PROPONENT'S ENVIRONMENTAL ASSESSMENT



## Location and Topography

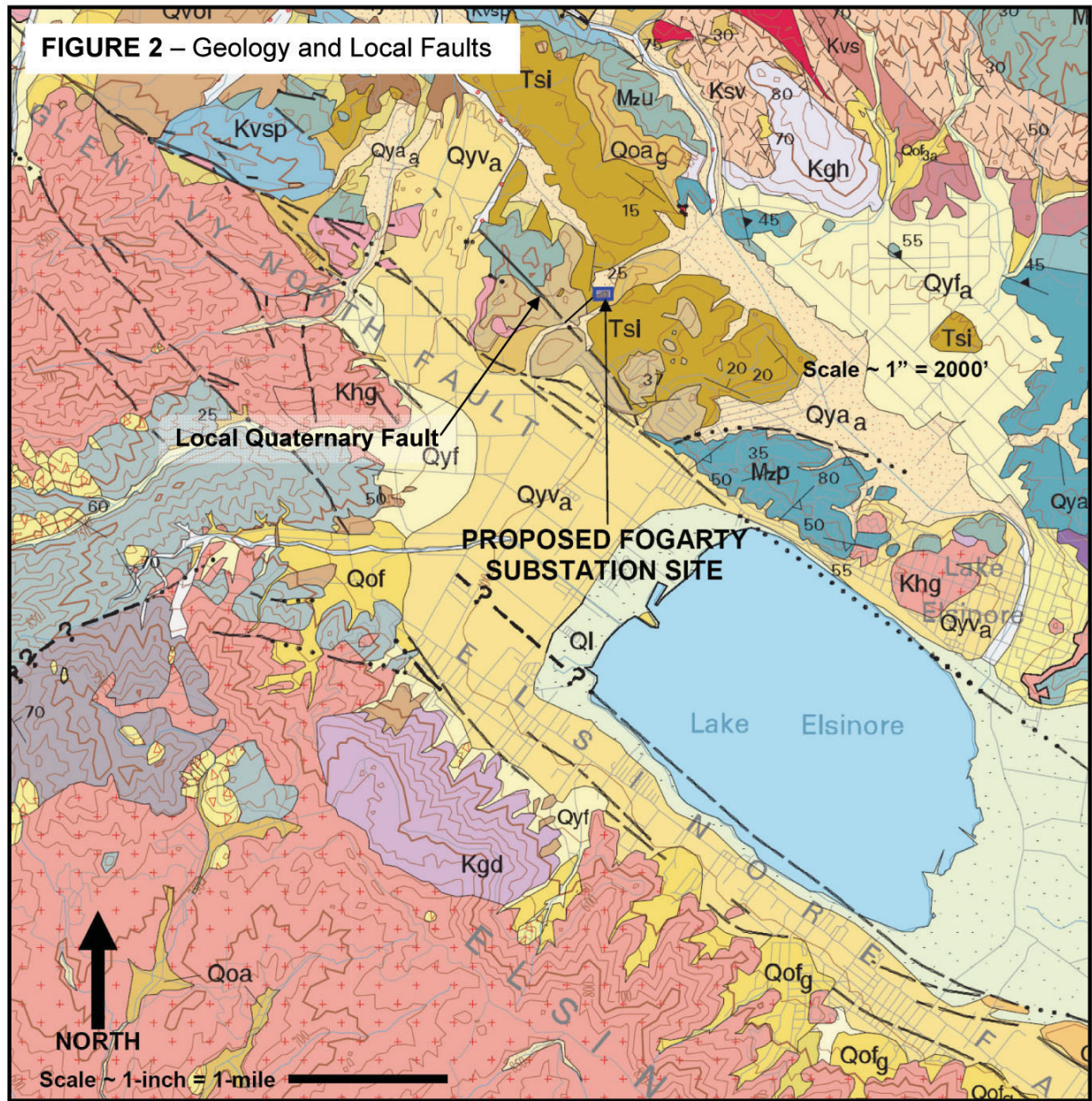


FIGURE 4.6-1



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**FIGURE 2 – Geology and Local Faults**



GEOLOGIC MAP  
UNIT EXPLANATION

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|---|---|

Revision date: February 14, 2007

Source: Morton, 2004 and County of Riverside, 2003

FOGARTY SUBSTATION – PROPONENT'S ENVIRONMENTAL ASSESSMENT



## Geology and Local Faults

0 | .5 | 1 MILE FIGURE 4.6-2

Proponent's Environmental Assessment  
Fogarty 115 kV Substation Project

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Source: Soil Survey of Western Riverside Area, California, November, 1971.

Revision date: February 14, 2007

## FOGARTY SUBSTATION – PROPONENT’S ENVIRONMENTAL ASSESSMENT



### Soil Units

No Specific Scale



FIGURE 4.6-3

Proponent's Environmental Assessment  
Fogarty 115 kV Substation Project

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soils are generally comprised of sandy loams with varying amounts of clay. These soils are generally well-drained, have slow to rapid runoff, moderately slow permeability, and a low shrink-swell potential. Placentia soils are generally comprised of sandy loam with clay lenses. There are some areas in which the Placentia soils contain gravel. The Placentia soils are well or moderately well drained, with slow to rapid runoff, very slow permeability, and a low shrink-swell potential (NRCS, 2006).

### **Faults and Earthquake Potential**

The Proposed Project is located in a tectonically inactive portion of the Elsinore Trough within the Elsinore fault zone (see **Figure 4.6-4, Regional Faults**). The closest major active faults to the Proposed Project are the Glen Ivy North and Temecula segments of the Elsinore fault zone. The Glen Ivy North segment of the Elsinore fault is located 0.5-mile south of the Proposed Project Site. Extending southeast from Corona, the Glen Ivy North segment is approximately 22 miles long (extending to the south edge of Lake Elsinore), followed by the 27-mile-long Temecula segment that extends to the southeast. CGS (Cao 2003) estimates a maximum earthquake range of magnitude 6.8 for the Temecula and Glen Ivy segments. The Elsinore fault is characterized by right-lateral strike-slip movement and the two segments have an average slip rate of 5.0 ( $\pm 2.0$ ) millimeters per year (mm/yr). Subsurface investigations have shown that the Elsinore fault is active and may have a recurrence interval on the order of about 250 years for large earthquakes (Rockwell *et al.* 1986). This fault zone is considered active and certain portions are included within an Alquist-Priolo Earthquake Fault Zone designated by the State of California (CDMG, 1980a and 1980b). The nearest portion within an Alquist-Priolo Earthquake Fault Zone is located approximately 1.5 miles to the west. No active or potentially active faults are known to pass through the Proposed Project Site. The San Jacinto and San Andreas faults are located approximately 21 and 32 miles to the northeast, respectively (Blake, 2002). The location of the North Glen Ivy fault relative to the Proposed Project is shown on Figures 4.6-2 and 4.6-4. There are no known active or potentially active faults in the immediate vicinity, although the main surface trace of the Glen Ivy North fault segment is mapped approximately 2,750-feet south of the Proposed Project Site and a smaller Quaternary fault (approximately 1,200-feet to the south; County of Riverside, 2003) may also be associated with the same zone.

### **GEOLOGY AND SOIL HAZARDS**

Geology and soil hazards potentially affecting the Proposed Project include fault rupture, strong earthquake groundshaking, liquefaction, ground cracking, and expansive soils.

#### ***Fault Rupture***

Fault rupture is considered a hazard because the site is within less than 0.5-mile from a mapped Quaternary fault (County of Riverside, 2003), approximately 1,200 feet to the south. This fault is not considered active, but falls within the fault study guidelines included in the latest County of Riverside general plan.

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### **Ground Shaking**

Areas most susceptible to intense ground shaking are generally located closest to the earthquake-generating fault, as well as more distant areas underlain by thick, loosely unconsolidated and water saturated sediments. Ground movement during an earthquake can vary depending on the overall magnitude, distance from the fault, focus of the earthquake energy, and type of geologic materials underlying the site (Mualchin 1996).

Magnitude is the measure of energy released in an earthquake, while intensity measures the ground shaking effects at a particular location. Ground shaking intensity varies substantially depending on underlying substrate at a particular location. Areas atop bedrock typically experience less severe ground shaking than those underlain by loose, unconsolidated materials.

The Proposed Project Site location within 0.5 mile the active Elsinore fault zone indicates that the potential exists for a nearby earthquake of magnitude 6.0. Based on the California Geological Survey (2006) probabilistic hazard assessment ground motion computations, **Table 4.6-1, Estimated Earthquake Ground Motions** shows the potential for ground motions with a 10 percent probability of being exceeded in 50 years. The Proposed Project Site is a “soft rock” site, typically consisting of bedded Tertiary sedimentary formations such as the Silverado Formation.

The location of the Proposed Project Site near the active Glen Ivy North fault within the Elsinore fault zone suggests that very strong seismic shaking can cause ground cracking in natural geologic formations, soils, and artificial fill deposits. This may be particularly true at the contacts between these units where different material properties are juxtaposed.

**Table 4.6-1: Estimated Earthquake Ground Motions**

Ground Motions	Firm Rock	Soft Rock	Alluvium
Peak Ground Acceleration (g)	0.54	0.54	0.54
Spectral Acceleration (0.2-sec period)	1.26	1.26	1.26
Spectral Acceleration (1.0-sec period)	0.46	0.55	0.63

### **Liquefaction**

Unconsolidated soils that are water saturated may lose cohesion, and they are converted to a fluid-like state during severe ground shaking. This phenomenon is called liquefaction. It results from loss of soil shear strength induced by rapid ground shaking. Liquefaction can occur in areas characterized by less cohesive, granular materials that are water-saturated at depths less than 50 feet. Saturated unconsolidated alluvium exposed to moderate to high earthquake intensities may be susceptible to liquefaction.

##### ***4.6 Geology and Soils***

The State of California Geological Survey: Seismic Hazard Mapping Program has not yet issued seismic hazards maps for the Proposed Project Site under the mapping program mandated by the Seismic Hazards Mapping Act. Mapping is planned for the Lake Elsinore and Wildomar quadrangles in coming years (USGS 2006).

Liquefaction susceptibility generally ranges from low to moderate on much of the valley floor to high in areas north of Lake Elsinore. The County of Riverside general plan map of liquefaction areas, coupled with the presence of some alluvium under the northern portion of the Proposed Project Site, suggest that some liquefaction hazard may exist. Alluvial formation thickness and depth to groundwater is unknown.

##### ***Expansive Soils***

Expansive soils contain significant amounts of clay that expand when they become wet and contract when they dry, which can cause damage to foundations. Soils forming on the older alluvium and Silverado Formation units can be clay-rich and have moderate to very high expansion potential, as can portions of the Silverado Formation itself.

##### ***Landslides, Erosion, and Subsidence***

The topography of the site's immediate vicinity suggests that the potential for landslides (including lateral spreading) and severe soil erosion is low. Although the Elsinore groundwater basin is in overdraft, there is no known subsidence affecting the site (Lake Elsinore General Plan 6-16).

#### **4.6.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

##### **Federal**

The Uniform Building Code (UBC-1997) & California Building Code (CBC-2001) define different regions of the United States and rank them according to their seismic hazard potential. There are four types of these regions, including Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest seismic potential. The proposed project is located within Seismic Zone 4, and the relevant standards listed in Seismic Zone 4 would apply to the project.

##### **State**

##### ***Alquist-Priolo Earthquake Fault Zoning Act***

The 1972 Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) provided for the delineations of rupture zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces, in order to reduce the hazards associated with locating structures for human occupancy in the vicinity of active fault traces. Cities and counties regulate the development projects within areas described in the Alquist-Priolo Act.

***Seismic Hazards Mapping Act***

The California Seismic Hazards Mapping Act of 1991 was enacted to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This Act mandates that the state geologist delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones.

***California Building Code***

The California Building Code (CBC-2001) is a modified version of the Uniform Building Code (UBC-1979) published in the United States by the International Conference of Building Officials. Standards and text were amended to reflect California earthquake conditions. Oversight of the CBC is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating building standards.

**Regional and Local*****County of Riverside***

The County of Riverside General Plan (Policy S2.1a3) requires geologic studies or analyses for critical structures including critical facilities, high-occupancy buildings, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the County's Earthquake Fault Studies Zones map. Critical facilities include infrastructure that must remain operational after an earthquake, and facilities that pose unacceptable risks to public safety if severely damaged. In Riverside County, critical facilities include schools, hospitals, fire and police stations, emergency operation centers, communication centers, electrical infrastructure, dams, and industrial sites that use or store explosives, toxic materials, or petroleum products (County of Riverside 2003).

***City of Lake Elsinore***

The City of Lake Elsinore is currently writing a new General Plan. The current General Plan, Public Safety and Urban Services Element (City of Lake Elsinore 1990) recommends several policies be adopted to protect people and structures from geologic hazards.

**4.6.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to geology and soils come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Hart and Bryant, 1997); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides

### 4.6 *Geology and Soils*

- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water

#### 4.6.4 IMPACT ANALYSIS

##### 4.6.4.1 CONSTRUCTION IMPACTS

**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Hart and Bryant, 1997); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides?**

Construction of the Proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction; and landslides. Even though the proposed Project Site is located in an area susceptible to earthquake forces, the short duration of the Construction period would make the probability of experiencing a large earthquake very low. In addition, since the proposed structures are not designed for human occupancy, it is unlikely that construction personnel would be indoors if an earthquake occurred during construction. Therefore, construction impacts associated with fault rupture, and strong ground shaking are not expected. Implementation of applicant proposed measures **GEO-SCE-1, and -2** would ensure construction impacts related seismic activities are less than significant.

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

Construction of the Proposed Project would not result in substantial soil erosion or the loss of topsoil. Because the Proposed Project's disturbance area would be greater than one acre, specific erosion control measures would be identified as part of the National Pollution Discharge Elimination System (NPDES) permit and Storm Water Pollution Prevention Plan (SWPPP) required for the Proposed Project (See Water Quality and Hydrology for regulatory framework). During construction, the Construction SWPPP erosion control measures would be implemented to avoid or minimize soil erosion and off-site sediment deposition. There would be no soil removed from the site; however 50,000 cubic yards of new clean fill material may be imported. Therefore, soil erosion impacts associated with proposed earthwork are anticipated. To address this issue, SCE has proposed implementing erosion control



measures at the site during construction in order to protect soil and surface water in the project area. These measures are presented in **GEO-SCE-3** detailed below. With the implementation of BMP's and related Construction SWPPP requirements outlined in GEO-SCE-3, construction soil erosion or the loss of topsoil impacts would be less than significant.

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

The Proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable due to construction of the Proposed Project. The Proposed Project is located on a relatively flat area. Given the site topography, there is negligible potential for landslides or other slope stability concerns from Proposed Project construction. Although the Elsinore groundwater basin is in overdraft, there is no known subsidence affecting the site, and the Proposed Project does not include activities that would induce subsidence. There are potential hazards associated with subsidence, landslides, and liquefaction. These hazards would be identified in a detailed geotechnical report. Therefore, SCE is proposing the GEO-SCE-2 protective measure, detailed below. After implementation of SCE Geo-2, impacts associated with unstable geologic conditions would be less than significant.

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

The Proposed Project has the potential to be located on expansive soils. Soil expansion is a phenomenon by which clay-rich soils expand or swell when they are wet and shrink upon drying. Therefore, potential hazards associated with expansive soils are anticipated. Implementation of SCE proposed measure GEO-SCE-2 would ensure impacts related to expansive soils would be less than significant.

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

Construction of the Proposed Project does not require septic tanks or alternative wastewater disposal systems. Wastewater generated on site would be nominal and portable toilets would be utilized during construction. Construction of the Proposed Project would result in no impact.

**Applicant Proposed Measures**

**GEO-SCE-1:** SCE seismic design specifications for the construction of SCE substations would be based on criteria presented by the Institute of Electrical and Electronics Engineers provisions set forth in its "Recommended Practices for Seismic Design of Substations." However, the foundations shall be designed in compliance with CBC-2001, UBC-1997 and anchorage loads as provided by equipment manufacturers, whichever is more severe.



### 4.6 Geology and Soils

**GEO-SCE-2:** Prior to final grading plans and design of substation equipment foundations, a geotechnical and engineering geology study would be performed to identify site-specific soil and geologic conditions in enough detail to support final engineering and the requirements of reviewing agencies. Recommendations from the geotechnical and engineering geology study would be incorporated into the final project design.

**GEO-SCE-3:** Substation improvements and construction activities would be performed in accordance with the soil erosion and sediment containment measures specified in the Construction SWPPP. Implementation of the SWPPP would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The construction SWPPP would identify BMPs to be implemented during construction activities. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. SCE would obtain a grading permit.

### Mitigation Measures

Because construction of the Proposed Project after implementation of the Applicant Proposed Measures would result in less than significant impacts to geology and soils, no mitigation measures are required.

#### 4.6.4.2 OPERATION IMPACTS

**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Hart and Bryant, 1997); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides?**

Operation of the Proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction; and landslides. Due to its proximity to an active fault zone, the Proposed Project would experience moderate to high levels of earthquake-induced ground shaking generated by large earthquakes occurring on the Elsinore fault zone. The nearest active or potentially active fault is approximately 0.5-mile south of the Proposed Project; however, the Proposed Project is not subject to the Alquist-Priolo Earthquake Fault Zoning Act. The Proposed Project Site is not within the County of Riverside general plan earthquake fault study zone encompassing the Glen Ivy North fault south of the site. However, the Proposed Project Site is within 0.5-mile of a Quaternary fault. Even though the Proposed Project is located in an area susceptible to earthquake forces, the proposed structures are not designed for human occupancy and it is unlikely that operations personnel would be indoors if a large local earthquake occurred. Potential impacts associated with fault rupture are addressed in GEO-SCE-2. Therefore, anticipated impacts due to seismic activity during operation of the Proposed Project are considered less than significant.

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

Operation of the Proposed Project would not result in substantial soil erosion or loss of topsoil. No impacts associated with soil erosion are anticipated.

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

The Proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable due to the operation of the Proposed Project. The Proposed Project is located on a relatively flat area. Operation of the Proposed Project would not alter structure foundations. As stated previously, the Proposed Project does not include activities that could induce subsidence. Once in operation, the proposed substation would have no impact on geologic or soil resources on site or within the surrounding area. Additionally, due to the low likelihood that a sequence of thick, low density saturated alluvium exists beneath the western portion of the Project Site (see Section 4.8, Hydrology and Water Quality) liquefaction potential is low. Therefore, potential hazards associated with subsidence, landslides, and liquefaction are not anticipated. Furthermore, operation of the Proposed Project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts associated with unstable geologic conditions are less than significant.

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

The Proposed Project has the potential to be located on expansive soils. In the Project Area clay content varies and soils may have a moderate to very high shrink and swell potential, and corrective measures would be implemented during Project design and construction. The operation of the Proposed Project would not create substantial risks to life or property due to the presence of expansive soils, and any impacts would be less than significant.

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

Operation of the Proposed Project does not require septic tanks or alternative wastewater disposal systems. No restrooms or other facilities that generate wastewater would be utilized during the operation of the Proposed Project. Operation of the Proposed Project would result in no impact.

**Applicant Proposed Measures**

SCE would implement Applicant Proposed Measures, (GEO-SCE-1, -2, -3), as discussed above, to reduce potential impacts to geology and soils to less than significant levels.

### **Mitigation Measures**

Because operation of the Proposed Project after implementation of the Applicant Proposed Measures would not result in significant impacts to geology and soils, no mitigation measures are required.

### **4.6.5 ALTERNATIVES**

#### **Alternative Project Site B**

Alternative B fronts the western side of Terra Cotta Road 90 feet from the Proposed Project Site. The location attributes of the Proposed Substation Site pertaining to geology and soils are essentially the same for the Alternative B Site location. The differences between the sites are minimal and would not alter findings of significance pertaining to impacts related to geology and soils. Consequently, the Alternative B Site location would have similar impacts as the Proposed Project.

#### **Alternative Project Site C**

Alternative Site C is located approximately 1,750 feet east of the Proposed Project Site on the southeast side of Nichols Road. Alternative C is relatively flat in the northwest portion and has slightly steeper terrain than the Proposed Project Site in the southeast portion and a drainage traversing across the site. The southeast portion of Alternative Site C would require more excavation than at the Proposed Project Site to achieve the necessary grade, thereby increasing the potential for soil erosion during construction. Alternative Site C is underlain by older alluvium (northwest) and Silverado Formation (southeast), which are more stable for foundations than younger alluvium at the Proposed Project Site. The grading at Alternative Site C would require that less fill to be brought to the site. In addition, the presence of Silverado Formation bedrock at the Alternative C site would provide greater ground stability during strong groundshaking events. The geology and soils impacts at Alternative Site C are considered less than significant and similar to the Proposed Project.

### **4.6.6 REFERENCES AND COMMUNICATIONS**

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## 4.7 Hazards and Hazardous Materials

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### 4.7.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Hazardous Materials**

Hazardous materials are chemical and non-chemical substances, which if released or misused, can pose a threat to the environment or human health. Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazardous materials are used in industry, agriculture, medicine, research, and consumer goods. Many products containing hazardous chemicals are routinely used and stored in homes. Hazardous materials can be in the form of explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, and petroleum products. These substances are most often released as a result of motor vehicle or equipment accidents, or because of chemical accidents during industrial use. These substances have the potential to leach into soils, surface water, and groundwater due to spills, if not properly contained.

Based on prior known land use, there is no indication that hazardous material or waste would be encountered during construction of the Proposed Fogarty Substation Project. Examination of the historical 1953 edition of the Elsinore, California USGS 7.5-minute topographic map quadrangle compiled from aerial photography taken in 1951, indicates that the Proposed Project Site was covered with native scrub vegetation. There is no indication on the map that structures were present on the Proposed Project Site. The 1953 map indicated that Terra Cotta Road and Coal Avenue were present as unpaved roads at the time and that their locations corresponded to those depicted on the 1988 aerial photo-revised edition of the Elsinore topographic map and with current aerial photographs. The 1953 topographic map showed that an active railroad spur line of the Atchison Topeka and Santa Fe railroad served both a clay mine pit at the Durant Siding, an auxiliary segment of track distinct from a through route, 3,600 feet northeast of the project site and an un-named siding 1.5 miles to the northwest among the clay pits south of the Alberhill community named on the map. By 1988 the railroad line had been abandoned. The 1988 topographic map was compiled from 1985 aerial photographs, and as of that date the Project Site and its vicinity had been cleared of native scrub for range improvement and/or dry farming purposes. The 1988 edition of the topographic map showed no changes in the distribution of structures in the immediate vicinity of the Project Site or in the location of unpaved roads closest to it.

A Phase I Environmental Site Assessment site reconnaissance was conducted on December 15, 2006 to identify recognized environmental conditions (RECs) at the substation site. A REC is defined by the American Society of Testing and Materials (ASTM) Standard E 1527-97 as: "The presence or likely presence of hazardous substances or petroleum products that indicate an existing release, past release or material threat of a release into the ground, groundwater, or surface water of the property."

The field investigation conducted by SCE Environmental Engineering failed to detect any surface evidence of hazardous materials, waste or other signs that would support the existence of RECs on-site. Based upon review of historical records, interviews, and the interpretation of historical topographic maps and aerial photographs of the Project Site it was found that there



#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### ***4.7 Hazards and Hazardous Materials***

was also no evidence to conclude a historical presence of RECs on-site. However, since the Project Site and the immediately surrounding areas may have historically been utilized for agricultural purposes, there is a potential for pesticides or metals to be present in soil and underlying groundwater.

##### **Airports and Airstrips**

Skylark Airport is a private airport located within the City of Lake Elsinore, in the vicinity of the southern edge of Lake Elsinore. This airport provides glider and skydiving opportunities for the community and surrounding region. The runway surface of Skylark Airport consists of gravel and sand. As such, this surface generally does not permit optimal conditions for frequent and convenient airport operations (City of Lake Elsinore 2006). Skylark Airport is located approximately 6 miles south of the Proposed Project site.

##### **Emergency Response**

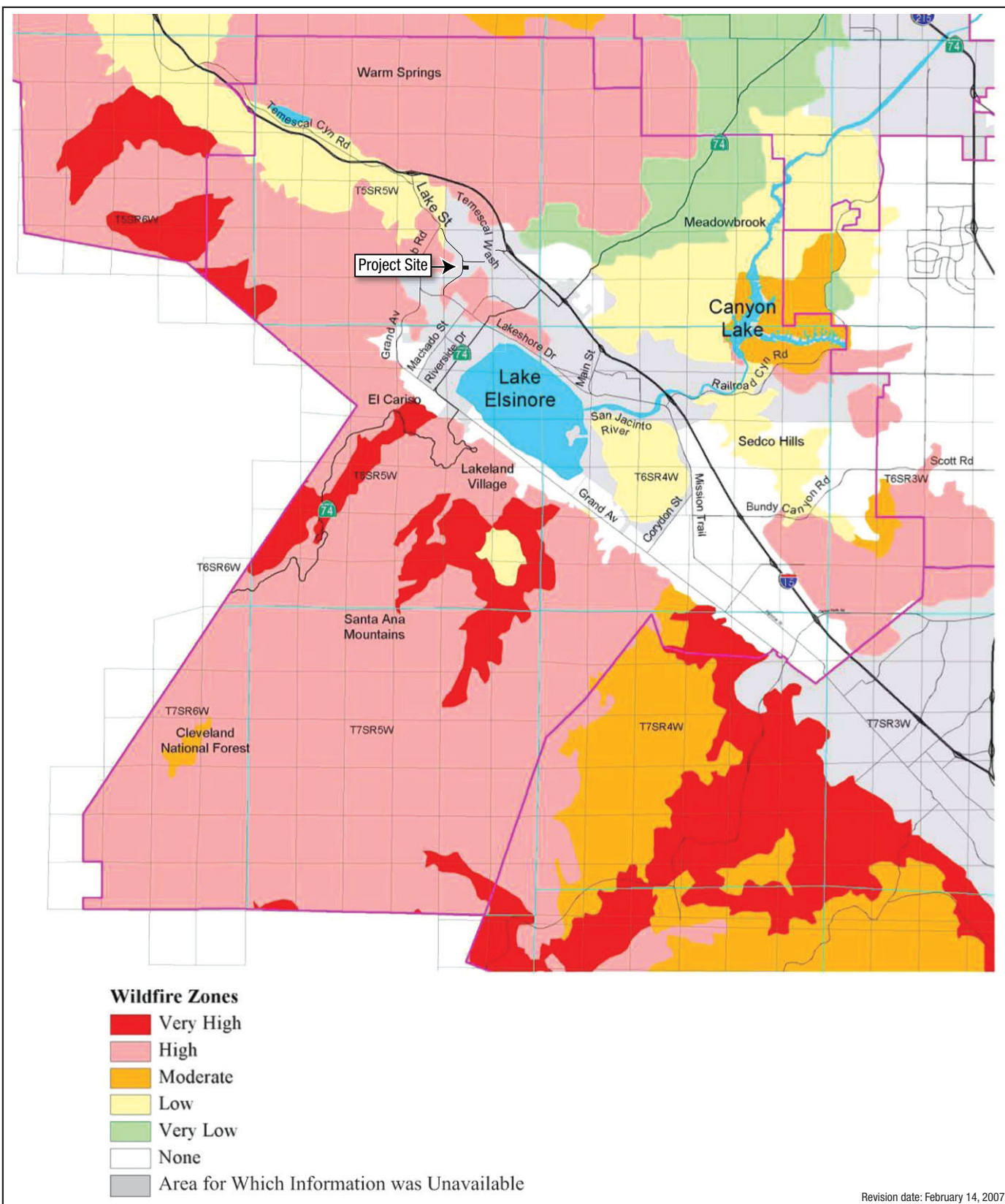
Emergency response time is defined as the speed at which fire, police, and ambulance service effectively reacts to an emergency or emergency call. Law enforcement in the Project Area is provided primarily through the Riverside County Sheriff's Department under contract with the Lake Elsinore Police Department.

The Riverside County Fire Department contracts with the California Department of Forestry and Fire Protection (CDF) to provide fire protection services to the Project Area, as well as unincorporated Riverside County. Additional discussion of emergency services is included in Section 4.13, Public Services.

##### **Fire Hazard**

Fire hazards are typically exacerbated by specific environmental conditions, such as dry climates or high winds. Fire hazards can also be the result of human activities, including use of petroleum fuels and products, and the combustion of natural gas and wood for heating. Wildfires in the Project Area are a threat year-round. Wildfires are a threat due to dry vegetation and grasslands, which are prone to catch fire from natural phenomenon (lightning strikes), as well as human sources (cigarette smoking, equipment use, and electric fires) (City of Lake Elsinore 2006).

As shown on **Figure 4.7-1, Elsinore Area Plan - Wildfire**, the Proposed Project Site is located in an area of northwestern Elsinore that consists generally of naturally vegetated hillsides and valleys that has moderate to high fire hazards (City of Lake Elsinore General Plan Background Report, January 2006). The Proposed Project Site's location is in a valley area for which the fire susceptibility was unranked on the above referenced wildfire hazard map due to information being "unavailable". The adjacent and nearby hillsides were ranked on the map as having moderate to high susceptibility to wildfire. A July 2006 site visit confirmed that the Proposed Project Site's annual grassland cover is contiguous with similar grassland and grassland and scrub cover that abuts steeper sloping terrain where natural scrub vegetation is more predominant. Therefore, the Proposed Project Site would be considered to similarly have a



Source: Riverside County Integrated Project

FOGARTY SUBSTATION – PROPONENT’S ENVIRONMENTAL ASSESSMENT



## Elsinore Area Plan – Wildfire

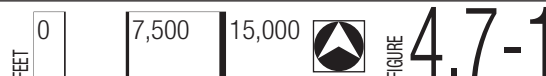


FIGURE 4.7-1

Proponent’s Environmental Assessment  
Fogarty 115 kV Substation Project

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moderate to high risk for fire hazard. Fire potential is typically greatest during the months of August, September, and October when dry vegetation coexists with hot, dry, Santa Ana winds.

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

##### **Federal**

###### ***US Environmental Protection Agency***

The US Environmental Protection Agency (US EPA) oversees the Clean Water Act through the local Regional Water Quality Control Boards, Air Districts, and the Department of Toxic Substances Control (DTSC). The Act also requires the US EPA to oversee each state's water quality standards decisions and public involvement processes. The US EPA must step in if state standards do not meet minimum requirements (US EPA 2006). The US EPA remains the lead on sites that are included on the National Priority List (NPL). The Federal Clean Water Act (Section 402(p)(2B)) sets standards for construction storm water discharges. Implementation of the Clean Water Act is the responsibility of each state.

###### ***Resource Conservation and Recovery Act***

The Resource Conservation and Recovery Act (RCRA) regulates hazardous waste from the time that waste is generated through its management, storage, transport, and treatment, until its final disposal. The US EPA has authorized the DTSC to administer the RCRA program in California.

##### **State**

###### ***California Occupational Safety and Health Administration***

California law defines a hazardous material as any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a present or potential hazard to human health and safety or to the environment if released in the workplace or the environment (California Health and Safety Code Section 25501). A hazardous waste is defined as a discarded material of any form (e.g., solid, liquid, gas) that may pose a present or potential hazard to human health and safety or to the environment when improperly treated, stored, transported, or disposed of, or otherwise managed (California Health and Safety Code Section 25117).

California's RCRA hazardous waste program is more stringent than the federal program and certain wastes that would not qualify as hazardous based on federal standards may still qualify as hazardous waste according to California standards (termed non-RCRA hazardous waste). Handling and storage of fuels, flammable materials, and common construction-related hazardous materials are governed by California Occupational Safety and Health Administration (Cal/OSHA) standards for storage and fire protection.

###### ***Department of Toxic Substances Control (DTSC)***

California Government Code Section 65962.5(a)(1) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### 4.7 Hazards and Hazardous Materials

Protection, a list of all the following: ...(1) [a] II hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (HSC).”

##### ***California Public Utilities Commission***

The California Public Utilities Commission (CPUC) General Order (GO) 95 specifies required clearances, grounding techniques, maintenance, and inspection requirements for electrical transmission and substation projects.

##### ***California Code of Regulations***

State laws and regulations are codified in the California Code of Regulations (CCR). CCR provisions relevant to the Proposed Project include the following:

- *8 CCR 2700 et seq. High Voltage Electrical Safety Orders.* Establishes essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger
- *14 CCR 1250-1258, Fire Prevention Standards for Electric Utilities.* Provides specific exemptions from electric pole and tower firebreak and electric conductor clearance standards, and specifies when and where standards apply

##### **Regional and Local**

##### ***City of Lake Elsinore***

Community Wildfire Protection Plans (CWPP) are authorized and defined in the Healthy Forests Restoration Act (HFRA) (City of Lake Elsinore 2006). The HFRA places emphasis on community planning by extending a variety of benefits to communities with a wildfire protection plan. Critical among these benefits is the option of establishing a localized definition and boundary for the wildland-urban interface and the opportunity to help shape fuels treatment priorities. The Lake Elsinore General Plan Update recommends the City adopt a CWPP.

##### **4.7.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to hazards and hazardous materials come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school



- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

#### 4.7.4 IMPACT ANALYSIS

##### 4.7.4.1 Construction Impact

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

Construction of the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials to be used during the construction of the Proposed Project include gasoline, diesel fuel, oil, and lubricants. There are no feasible alternatives to these materials for operation of construction vehicles and equipment. However, best management practices would be implemented during construction to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. The Project would also implement applicant proposed measure HAZ-SCE-1 to further reduce potential impacts. Therefore, construction of the Proposed Project would have less than significant impacts associated with hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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

Construction of the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Due to the low volume and low toxicity of the hazardous materials that would be used during construction, the potential for environmental impacts from hazardous material incidents during construction is less than significant. In addition, a site specific Construction Storm Water Pollution Prevention Plan (SWPPP) would be developed (see Section 4.8, Hydrology and Water Quality for more detail) and implemented for construction of the Proposed Project.



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##### 4.7 Hazards and Hazardous Materials

In the event that contaminated soil is encountered during excavation activities at the substation site, the soil would be segregated, sampled, and tested to determine appropriate treatment options and disposal. If the soil is classified as hazardous (according to RCRA criteria) the soil would be properly profiled, manifested and transported to a Class I Landfill or other appropriate soil treatment or recycling facility. Impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment are considered less than significant.

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

Construction of the Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Because there are no existing or proposed schools within one-quarter mile of the Proposed Project there is no impact.

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

The Proposed Project would not be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, there is no impact.

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

The Proposed Project is not located within an airport land use plan or, where such a plan has been adopted. Furthermore, the Proposed Project is not located within two (2) miles of a public airport or public use airport. The nearest airport is the Skylark Airport, which provides glider and skydiving opportunities for the community. Because it is located approximately 6 miles from the Proposed Project there is no impact.

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

The Proposed Project is not located within the vicinity of a private airstrip, thus construction of the Proposed Project would result in no impact.

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

Construction of the Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. All construction activity would occur on the Proposed Project Site and no activities are planned that would affect response by police, fire, ambulance, or paramedic vehicles. However, in the event that an activity is planned that could affect traffic, (i.e, equipment delivery necessitating lane closures), SCE would consult with local agencies including Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore. Therefore, there would no impact to an adopted emergency response plan or evacuation plan

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

Construction of the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. However, the existing grasslands adjacent to the Proposed Project Site are prone to wildfires and could be ignited if proper fire prevention measures are not implemented. The impact of the Proposed Project on the potential exposure to wildland fires would be reduced to a less than significant level through the implementation of SCE fire prevention protocols.

**Applicant Proposed Measures**

SCE would implement the following standard measures to reduce potential impacts from hazards to less than significant levels.

**HAZ-SCE-1:** SCE would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) prior to initiating construction activities. The SWPPP would utilize BMPs to address the storage and handling of hazardous materials during construction activities.

**HAZ-SCE-2:** SCE would implement standard fire prevention and response measures. The standards address spark arresters, smoking and fire rules, storage and parking areas, use of gasoline-powered tools, road closures, use of a fireguard, fire suppression tools, fire suppression equipment, and training requirements. Portable communication devices (i.e. radio or mobile telephones) would be available to construction personnel.

**Mitigation Measures**

Because construction of the Proposed Project would result in less than significant impacts to hazards and hazardous materials, no mitigation measures are required.

#### 4.7.4.2 Operation Impacts

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

Operation of the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The substation would be unmanned and the electrical equipment within the substation would be remotely monitored and controlled by a power management system from Valley Substation. Due to the substation being remotely operated, SCE personnel would generally visit for electrical switching and routine maintenance. These visits are anticipated to occur two to three times per week.

Hazardous materials to be used during the operation of the Proposed Project would be limited to those necessary to operate maintenance vehicles and equipment. These would include small amounts of gasoline, diesel fuel, oil, and lubricants. To minimize potential impacts from spills of hazardous materials, the design of the Proposed Project would provide containment and/or diversionary structures or equipment to prevent discharge of an oil spill as described in the SPCC requirements (40 CFR Part 112.1 through Part 112.7). With Project implementation of applicant proposed measure **HAZ-SCE-3** impacts associated with the transportation, use, or disposal of hazardous materials are considered less than significant.

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

Operation of the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. To minimize potential impacts from spills of hazardous materials, the design of the proposed substation would provide containment and/or diversionary structures or equipment to prevent discharge of an oil spill as described in the SPCC requirements (40 CFR Part 112.1 through Part 112.7). With Project implementation of applicant proposed measure HAZ-SCE-3 impacts caused by hazards and hazardous materials on-site during operation are less than significant.

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

Operation of the Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Because there are no existing or proposed schools within one-quarter mile of the Proposed Project there is no impact.

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

Operation of the Proposed Project would not be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, there is no impact.

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

The Proposed Project is not located within an airport land use plan or, where such a plan has been adopted. Furthermore, the Proposed Project is not located within two (2) miles of a public airport or public use airport. The nearest airport is the Skylark Airport, which provides glider and skydiving opportunities for the community. Because it is located approximately 6 miles from the Proposed Project there is no impact.

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

The Proposed Project is not located within the vicinity of a private airstrip, thus construction of the Proposed Project would result in no impact.

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

Operation of the Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. All operation activities would occur on the Project Site. Therefore, there would be no impact to an emergency response or evacuation plan.

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

Operation of the Proposed Project would not expose people or structures to wildland fires. The Proposed Project Site has irrigated and landscaped setbacks of 25 feet where the substation abuts Terra Cotta Road (to the west) and 20 feet from Hoff Avenue (to the south) and 34 feet along Kings Highway (to the north). An easement of 58 feet abuts the eastern side of the substation. The setbacks surrounding the substation comprise a defensible space with managed vegetation. In addition the 8 foot high block wall surrounding the substation provides a tall, solid structural barrier separating the exterior defensible zone with managed vegetation from an internal bare gravel-surfaced zone that will be maintained free of all vegetation. The impact of the Proposed Project on the potential exposure to wildland fires

#### 4: ENVIRONMENTAL IMPACT ASSESSMENT

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##### 4.7 Hazards and Hazardous Materials

would be reduced to a less than significant level through the implementation of SCE fire prevention protocols.

##### **Applicant Proposed Measures**

SCE would implement the following standard measures to reduce potential impacts from hazards to less than significant levels.

**HAZ-SCE-3:** SCE would prepare and implement a Spill Prevention, Control and Countermeasure plan (SPCC) prior to transporting any oil containing equipment to the site.

##### **Mitigation Measures**

Because the Proposed Project would not result in significant hazards on-site, including hazards due to wildfire susceptibility, and hazardous material impacts, no mitigation measures are required.

##### **4.7.5 ALTERNATIVES**

###### **Alternative Project Site B**

Alternative B is equivalent in its uses of hazardous materials as those used during construction and operation of the Proposed Project. Therefore, construction and operation of Alternative B would not create additional hazards. Because Alternative B is equivalent to the Proposed Project the impacts resulting from hazards and hazardous materials would be the same. Namely, impacts resulting from potential hazards on-site, including hazards due to wildfire susceptibility, and hazardous materials would be less than significant.

###### **Alternative Project Site C**

Alternative C is equivalent in its uses of hazardous materials as those used during construction and operation of the Proposed Project. Therefore, construction and operation of Alternative C would not create additional hazards. Because Alternative C is equivalent to the Proposed Project the impacts resulting from hazards and hazardous materials would be the same. Namely, impacts resulting from potential hazards on-site, including hazards due to wildfire susceptibility, and hazardous materials would be less than significant.

##### **4.7.6 REFERENCES AND COMMUNICATIONS**

City of Lake Elsinore. January 2006. General Plan Background Report.

SCE Environmental Engineering. January 12, 2007. Phase I Environmental Site Assessment Report (Fogarty Substation).

## 4.8 Hydrology and Water Quality

### 4.8.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Climate and Precipitation**

Climatic conditions for Riverside County, including the city of Lake Elsinore, are typical of inland areas of Southern California. The climate is dry, with an average annual precipitation of 10.7 inches. Record low and high rainfall is 5.3 inches and 21.4 inches, respectively. The area receives 85 percent of its annual rainfall from November through March. Light winter snow can occur in the area at higher elevations, but snow is uncommon (Western Regional Climate Center, 2006).

#### **Topography and General Drainage Features**

The Proposed Project is located in the City of Lake Elsinore in western Riverside County. Elevations in the Project Area range from approximately 1,260 feet along the edge of Lake Elsinore to approximately 1,836 feet in the low hills just west of the Proposed Project Site. Lake Elsinore is located within “Elsinore Valley,” the northwestern extension of Temecula Valley east of the Santa Ana Mountains. A northern drainage divide exists between Lake Elsinore and the Proposed Project Site (i.e., water from the site drains to the north and northwest away from the lake) at an elevation of roughly 1,400 feet. An eastern drainage divide exists about one mile southeast of Lake Elsinore. In addition to the lake, the San Jacinto River and Temescal Wash are the primary surface hydrology/drainages in the city.

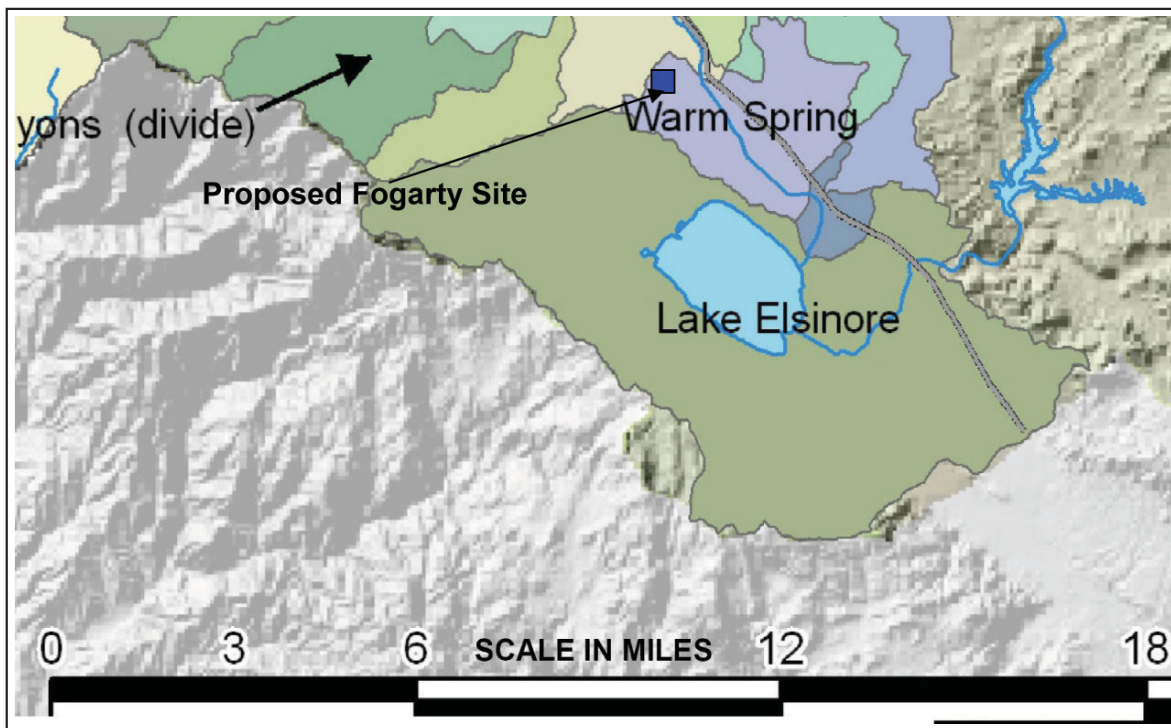
The Project Area lies within a recent alluvial valley bordered by eroded older alluvial fan (symbol Qoa) and soft bedrock formations and partially within soft bedrock termed the Silverado Formation (symbol Tsi; see (Figure 4.6-2 Geology Map in the Geology and Soils section). The soils associated within the surface subwatershed immediately around the Proposed Project Site are derived from the weathering of the Silverado Formation and the older alluvium, and from alluvial materials in the recent drainages that are predominantly derived from granitic rocks in the Santa Ana Mountains to the west. The soil types are Altamont (AbF), Ramona (RaB2), and Placentia (PID) (see Figure 4.6-3 Soils Map in the Geology and Soils section; UC Davis Soil Resource Lab, 2006). Altamont soils consist of deep, well drained soils with medium to very high runoff, and slow permeability. Typically Ramona soils are generally well-drained, have slow to rapid runoff, and moderately slow permeability. Placentia soils are typically well or moderately well drained, with slow to rapid runoff, and very slow permeability. These soils may range from 30 to 80 inches thick depending upon age and degree of erosion (NRCS, 2006).

#### **Surface Water**

The Proposed Project is located in the headwaters area of the northwest-draining Temescal Wash. The Temescal Wash is immediately adjacent to (and north and west of) Lake Elsinore and its primary water source, the San Jacinto River entering from the northeast. The Proposed Project Site is within the Warm Spring Subwatershed of the southernmost portion of the Santa Ana Watershed, which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (see **Figure 4.8-1, Santa Ana Watershed – Warm Spring Subwatershed** and **Figure**



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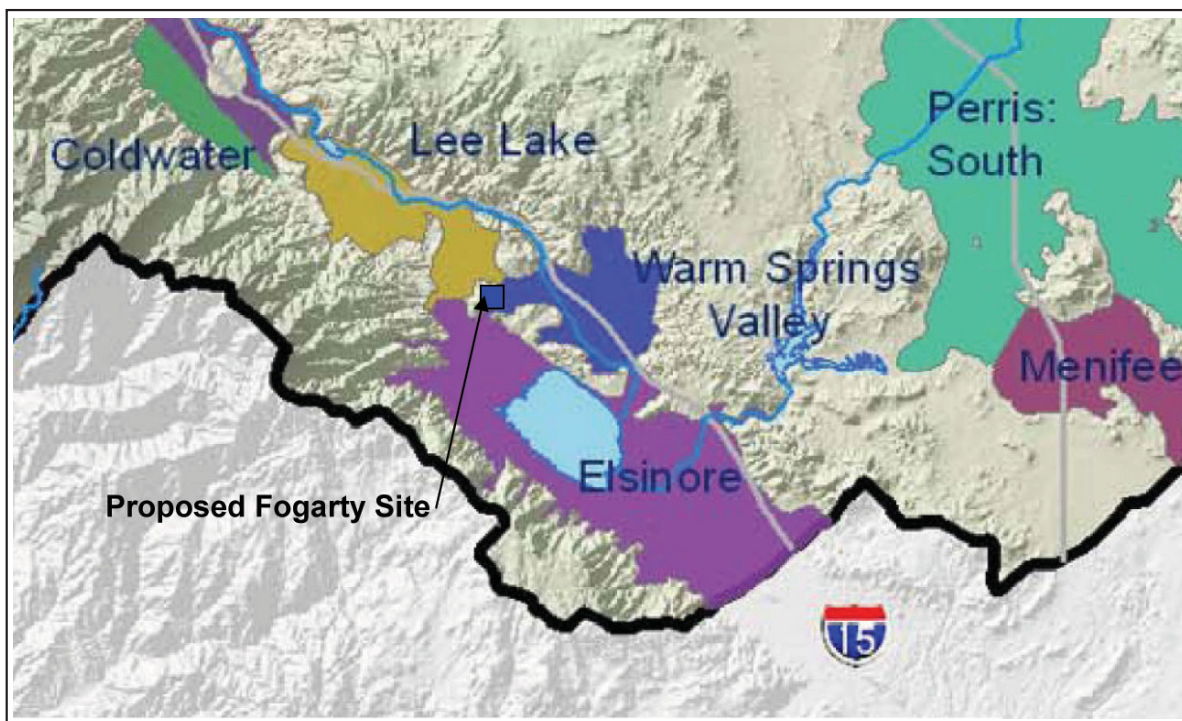


FOGARTY SUBSTATION – PROPONENT’S ENVIRONMENTAL ASSESSMENT

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## Santa Ana Watershed – Warm Spring Subwatershed

FIGURE 4.8-1



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## Groundwater Subbasins – Warm Springs Valley Subbasin

FIGURE 4.8-2

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**4.8-2, Groundwater Subbasins - Warm Springs Valley Subbasin).** Warm Spring Subwatershed drains to the northwest along Temescal Wash (or Creek) for which the surface water quality data are summarized in the SARWQCB Basin Plan (1995 with triennial updates). The Elsinore Subwatershed is to the south, but would not be affected by the Proposed Project, therefore is not discussed in detail.

Several surface water features are present near the Project Area. The surface waters include the San Jacinto River, which flows into Lake Elsinore. This in turn flows into the Temescal Wash during the periods of high lake levels. A brief description of each of these hydrologic features is provided below.

**Lake Elsinore.** Lake Elsinore is a natural lake, approximately five miles long and two miles wide. The lake varies in size in response to varying hydraulic conditions ranging from 6,000 acres in very wet years to a dry lakebed in drought years. A levee was constructed across the lake in 1995 to reduce the water surface area and reduce evaporation. The San Jacinto River flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Flow has been reduced over the last 100 years because of stream diversions and groundwater withdrawals in the tributary watershed. Lake Elsinore is approximately 1.7 miles south of the proposed site.

**San Jacinto River.** The San Jacinto River is located east of Lake Elsinore and is the largest tributary to Lake Elsinore. The river drains a 723 acre watershed. Headwaters of the river are located in the San Jacinto National Forest. The lower portion of the 765-mile watershed is in urban and agricultural land. The river flows northwest from the San Gabriel Mountains, just east of Perris, and then continues southwest through Railroad Canyon to Railroad Canyon Reservoir (also called Canyon Lake). The river terminates at Lake Elsinore.

**Temescal Wash.** Temescal Wash was historically an ephemeral stream. It was dry with little or no base flow during most of the year, except during and after storms. Water development in the basin diverted surface flows and lowered groundwater levels by seasonal pumping for irrigation and domestic supplies. Temescal Wash serves as the natural drainage course for outflow from Lake Elsinore, and the major drainage artery for the Temescal Valley. The wash flows 18 miles from Lake Elsinore northwestward to the Santa Ana River near Corona.

The Temescal Wash receives treated effluent from the Eastern Municipal Water District (MWD) recycled water system when effluent flows exceed recycled water demand and storage capacity in eastern MWD's service area. This flow is mostly during winter and does not contribute to base flows. As the area grows, the frequency of effluent discharge to Temescal Wash is expected to increase, eventually becoming year-round. (MWH 2005).

A small arroyo-like drainage course meanders northerly along the eastern property boundary of the Proposed Project Site. The drainage course generally follows the ROW for Dobbler Avenue in a defined channel that meanders westerly in several locations, crossing the 20 feet setback from the ROW for the non-existent roadway and extending briefly into a 1.0 acre excess land portion of the Proposed Project Site that would not be used for substation purposes. The closest westerly meander of the arroyo-like drainage course, at the southeast corner of the property, is located approximately 170 feet east of the southeast corner of the 2.3-acre

development envelope of the Proposed Project. Site grading for the Proposed Project would not intrude into nor require a crossing of the drainage course. Approximately 135 feet of a shallow drainage swale that is tributary to the above drainage crosses the southeast corner of the 2.3 acre Proposed Fogarty Substation footprint. At its widest point near the southern boundary wall of the substation site, the bottom of the swale is approximately 30 feet wide. The bottom of the swale narrows to approximately 5 feet where its course crosses the eastern boundary of the substation development envelope. Surface sheet flow from an upstream catchment covering an area of approximately 9.25 acres enters the drainage swale that crosses the site.

### **Groundwater**

Groundwater in the Project Area is within the Warm Springs Valley Subbasin, which is north of the Elsinore Subbasin; these subbasins occupy areas that are similar to the surface watersheds (Figure 4.8-2, Groundwater Subbasins - Warm Springs Valley Subbasin). Warm Springs Valley Subbasin lies between the Lee Lake groundwater subbasin to the west, and non-water-bearing formations to the north and east. The Warm Springs Subbasin is not hydrologically connected to Elsinore Subbasin (they are separated by faults and non-water-bearing bedrock) and therefore the Elsinore Subbasin is not discussed in detail in this report. The Warm Spring Subwatershed is the primary source of recharge to the area. No water wells, and therefore no water well data, were found within (or nearby) the Warm Spring Subwatershed in the California Department of Water Resources (CDWR, 2006) on-line database.

Elsinore's local water supply is provided by the Elsinore Valley Municipal Water District (EVMWD), which uses approximately 53 percent imported water, 37 percent deep aquifer well water, and 10 percent treated water from Canyon Lake (EVMWD, 2006). The deep aquifer well sources supply roughly 12,600 acre-feet per year. EVMWD has two divisions, one in Elsinore, and one in Temescal Valley. Temescal Valley is in the same drainage system as Warm Springs Valley Subbasin. The Elsinore division has eight active municipal wells in the deep aquifer and the Temescal division has several domestic wells in the Coldwater Basin. There is no indication that the Warm Springs Valley Subbasin is a source of potable groundwater.

### **Water Quality**

Little is known about the groundwater characteristics of Warm Springs Valley Subbasin, although it is assumed that the groundwater resource is limited and may be of fair quality. The next subbasins down stream are the Lee Lake (no data found), Coldwater, and Temescal. The latter two have average total dissolved solids (TDS) values of 400 and 700 milligrams per liter (m/L; Wildermuth Environmental, Inc., 2005) respectively, and nitrate-nitrogen of 2.4 and 12.8 m/L respectively; it is assumed that the Warm Springs Valley Subbasin values may be within or near these ranges. Water quality objectives stated for Lee Lake (SARWQCB, 1995) for these two constituents are 600 m/L TDS and 6 m/L nitrate-nitrogen.

Water quality objectives and potential beneficial uses for the Temescal Creek Subwatershed and the Temescal (a related) groundwater subbasins are provide in **Tables 4.8-1, Water Quality Objectives – Temescal Creek Drainage** and **4.8-2, Beneficial Uses – Temescal Creek Drainage** (SARWQCB, 1995). These values are the water quality constituent thresholds

for the subbasins and any contributory degradation due to the Proposed Project would be measured against the potential to cause exceedance of these values.

**Table 4.8-1: Water Quality Objectives – Temescal Creek Drainage**

Inland Surface Streams	Water Quality Objectives (mg/L)							Hydrolic Unit	
	TDS	Hard.	Na	Cl	TIN	SO <sub>4</sub>	COD	Primary	Secondary
<b>Temescal Creek</b>									
Reach 1A – Santa Ana River Confluence to Lincoln Ave.	800	400	100	200	6	70	---	801.25	
Groundwater Subbasins	Water Quality Objectives (mg/L)						Hydrolic Unit		
	TDS	Hard.	Na	Cl	NO <sub>3</sub> -N	SO <sub>4</sub>	Primary	Secondary	
Bedford (Upper Temescal I)	840	440	80	100	9	200	801.32		
Lee Lake (Upper Temescal II)	600	300	100	100	6	140	801.34		
Coldwater (Upper Temescal III)	350	175	45	25	2	125	801.31		
Temescal	840	440	120	180	9	160	801.25		

The beneficial uses of surface water in the Project Area are as follows for the Temescal Creek drainage and associated groundwater subbasin: Municipal and Domestic Supply (MUN), Agriculture (AGR), Industrial (IND), Processing (PROC), Groundwater (GWR), Contact Water Recreation (REC-1), Non-Contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Rare, Threatened or Endangered Species (RARE).

**Table 4.8-2: Beneficial Uses – Temescal Creek Drainage**

Inland Surface Streams	Beneficial Use																		Hydrolic Unit	
	MUN	AGR	IND	PROC	GWR	REC-1	REC-2	WARM	WILD	RARE	WARM	WILD	RARE	WARM	WILD	RARE	WARM	WILD	Primary	Secondary
<b>Temescal Creek</b>																				
Reach 4 – Lee Lake to Mid-section line of Section 17 (downstream end of freeway cut)	+	I			I			I	I		I				I	x			801.34	
Reach 5 – Mid-section line of freeway cut) to Elsinore Groundwater Subbasin Boundary	+	x			x			x	x		x				x	x			801.35	
Reach 6 – Elsinore Groundwater Subbasin Boundary to Lake Elsinore Outlet	+				I			I	I		I				I				801.35	



**Table 4.8-2: Beneficial Uses – Temescal Creek Drainage**

Groundwater Subbasins	Beneficial Use																	Hydrolic Unit	
	MUN	AGR	IND	PROD	GRA	NUR	PAV	RECRE	RECRE	COMM	WATER	WATER	WATER	WATER	WATER	WATER	WATER	Primary	Secondary
Lee Lake (Upper Temescal II)	x	x	x	x														801.34	
Coldwater (Upper Temescal III)	x	x	x	x														801.31	
Temescal	x	x	x	x														801.25	

X = Present or Potential Beneficial Use, I = Intermittent Beneficial Use, + = Expected from MUN (see text)

### **Flooding and Dam Failure Inundation Areas**

The Federal Emergency Management Agency (FEMA) maintains and updates insurance flood hazard maps for both public and private use. The Proposed Project is not within a flood zone hazard area (see **Figure 4.8-3, FEMA Floodplain Boundaries and Local Hydrologic Features**). The Project Area is not located within the inundation zone of a reservoir or lake (City of Lake Elsinore, 2006).

## **4.8.2 APPLICABLE REGULATIONS, PLANS, AND STANDARDS**

### **Federal**

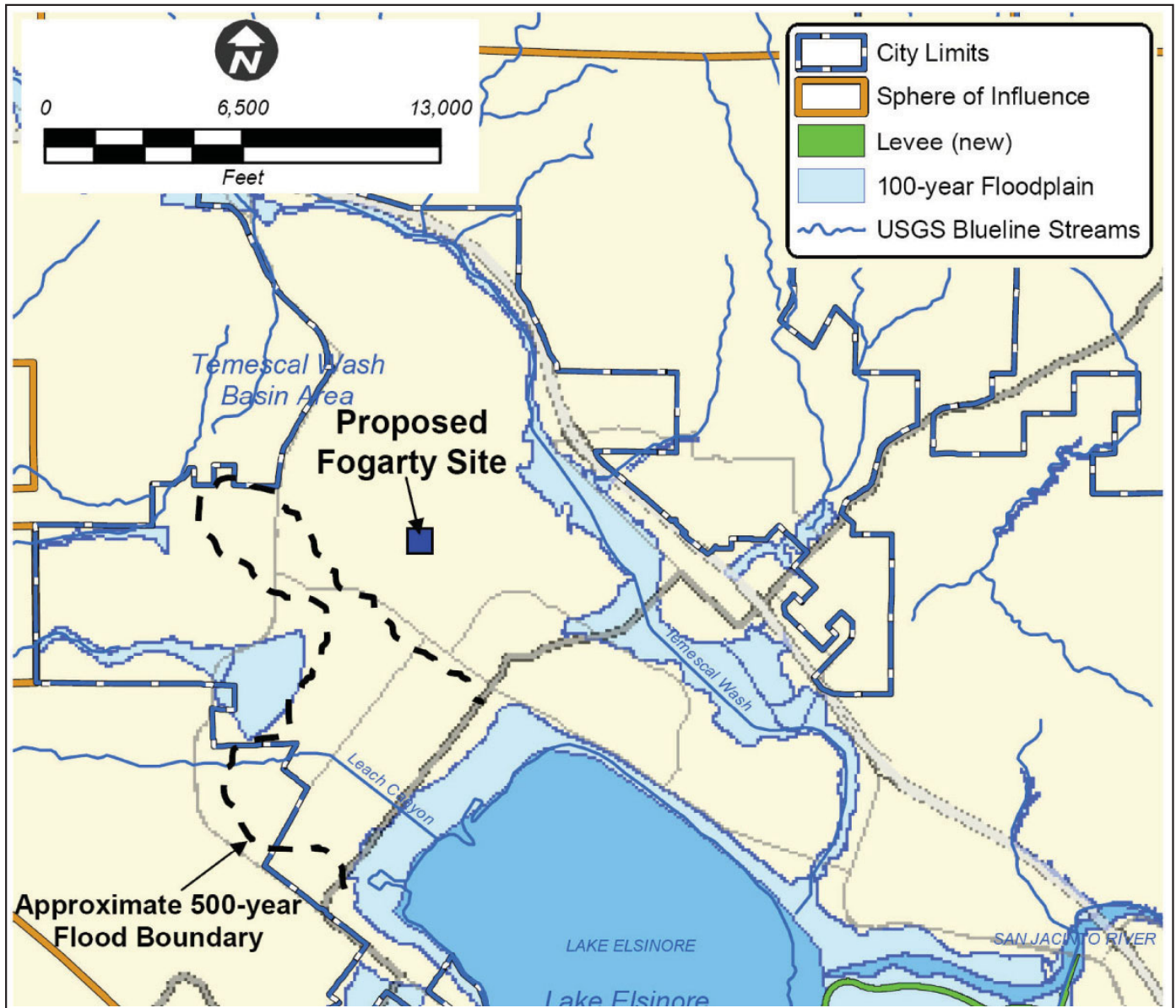
#### ***Clean Water Act***

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, regulates water quality in the United States. The CWA defines regulations for the discharge of pollutants to waters of the United States from any point source. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. These waters include all navigable waters and tributaries thereto, and adjacent wetlands. In 1987, amendments to the CWA added section 402(p), which established a framework for regulating non-point source storm water discharges under the National Pollutant Discharge Elimination System (NPDES). The Regional Water Quality Control Boards (RWQCB) (see below) implements the NPDES storm water program.

### **State**

#### ***Porter-Cologne Water Quality Act***

The Porter-Cologne Water Quality Control Act (Porter-Cologne) provides a comprehensive water quality management system for the protection of California waters. Porter-Cologne designates the State Water Resources Control Board (SWRCB) as the ultimate authority over State water rights and water quality policy, and also establishes nine Regional Water Quality Control Boards (RWQCB) to oversee water quality on a day-to-day basis at the local/regional level. The SWRCB and RWQCBs have the responsibility of granting permits for certain point-



Source: City of Lake Elsinore, 2006

Revision date: February 14, 2007

FOGARTY SUBSTATION – PROPONENT’S ENVIRONMENTAL ASSESSMENT



## FEMA Floodplain Boundaries and Local Hydrologic Features

FIGURE 4.8-3

Proponent’s Environmental Assessment  
Fogarty 115 kV Substation Project

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source discharges, and for construction and storm water runoff, and either waste discharge requirements or conditioned water quality certification for other discharges.

The SWRCB and RWQCBs are responsible for developing and implementing regional basin plans to regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Basin Plans are prepared by the RWQCBs to establish water quality standards for both surface and groundwater bodies within their respective jurisdictions. Specifically, Basin Plans designate beneficial uses for surface and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses, and describe implementation programs to protect all waters in the region.

The RWQCBs regulate discharges in waters within their respective jurisdictions through the administration of National Pollutant Discharge Elimination Systems (NPDES) permits, waste discharge requirements, and water quality certification. Water quality certification is administered by the RWQCBs to ensure that projects with federal permits do not violate State water quality standards.

#### ***State General Storm Water Permit***

In response to CWA requirements, the State of California has adopted a general storm water permit covering non-point source discharges from certain industrial facilities and from construction sites involving more than one acre. The General Permit requires preparation of a storm water pollution prevention plan (SWPPP) and implementation of best management practices to reduce the potential for non-storm water pollutants (chemicals and sediment) to be discharged from the construction site to waters of the State. The Proposed Project would likely be subject to this permit because the Proposed Project would involve greater than one acre of ground disturbance.

#### **Regional and Local**

##### ***County of Riverside***

**Riverside County General Plan.** Riverside County is susceptible to flood hazards associated with major stream drainages, however the proposed Fogarty Substation Site is outside all flood zones. Riverside County has experienced inappropriate modifications to drainages, rivers, and creeks, and thus, the County regulates urban development within or adjacent to water courses. The Riverside County General Plan Safety Element provides two policies to minimize the risk and hazards associated with modification to water courses and possible down stream flooding that apply to the Proposed Project.

**Policy S 4.5:** Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property nor adversely affect adjacent wetlands or riparian habitat.

**Policy S 4.11:** Require new projects anywhere in the County to mitigate any impacts that it may have on the carrying capacity of the local storm drain system.

##### 4.8 Hydrology and Water Quality

###### **City of Lake Elsinore**

**Elsinore Area Plan.** The Elsinore Area Plan identifies the Temescal Wash, Murrieta Creek, and the San Jacinto River, as well as Lake Elsinore, as posing significant flood hazards. Temescal Wash lies down stream from the Proposed Project Site.

The City of Lake Elsinore requires compliance with the Riverside County Flood Control and Water Conservation District NPDES/Municipal Stormwater Management Program. The County's Stormwater Quality Best Management Practice Design Handbook applies to erosion control and sediment management practices during grading and project operations.

**Lake Elsinore General Plan.** A majority of the of the regulatory requirements regarding environmental issues, such as flooding and surface water quality, are addressed at the project-specific level and not through General Plan designations. The General Plan Update includes general guidelines to address water resources issues. Relevant guidelines include:

- Adding a grading and erosion control ordinance that will reduce sediment impacts associated with construction
- Establishing a spill prevention and control program that will reduce impacts to surface and groundwater resources

The SWRCB Watershed Management Initiative and the Lake Elsinore Stabilization Project have identified specific projects. The goals and objectives for this organization include the following measure that is relevant to the Proposed Project.

- Route stormwater flows to on-site detention and retention facilities to increase recharge to groundwater and improve water quality.

In addition, under the Calderon-Sher Safe Drinking Water Act of 1996 (the Act), the EVMWD is required to prepare a report every three years for contaminants that exceed public health goals (PHGs; Health and Safety Code Section 116470 (2) [b]). PHGs are published by the Office of Environmental Health Hazard Assessment (OEHHA; Health and Safety Code Section 116365) as concentrations of contaminants in drinking water that OEHHA considers to pose no significant health risk if consumed for a lifetime. EVMWD maintains it system to these standards.

###### **4.8.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to hydrology and water quality come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Violate any water quality standards or waste discharge requirements
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
- Create or contribute to runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff
- Otherwise substantially degrade water quality
- Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam
- Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow

#### 4.8.4 IMPACT ANALYSIS

##### 4.8.4.1 Construction Impacts

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

Construction of the Proposed Project would not violate any water quality standards or waste discharge requirements. The Proposed Project facility design will include full consideration of the potential for erosion and release of potential groundwater and surface water contaminants. Compliance with NPDES and the August 15, 1996, the State Water Resources Control Board (SWRCB) General Permit for discharges from utility vaults and underground structures to surface waters will be required. This will include the requirement to implement appropriate Pollution Prevention Practices (PPPs), which are equivalent to BMPs. By complying with existing regulations the Project would not violate water quality or waste discharge regulations, and would not introduce pollutants into the surface water or groundwater to degrade water quality.

The agency for water quality issues in the region of the Proposed Project is the SARWQCB. For administering the NPDES, the SARWQCB requires a General Construction Activity Storm Water Permit for storm water discharges associated with any construction activity including clearing, grading, excavation reconstruction, and dredge and fill activities that results in the disturbance of at least one acre of total land area. As the Proposed Project would disturb more than one acre, a Storm Water Pollution Prevention Plan would be required for compliance. After implementation of the Construction SWPPP (**HYDRO-SCE-1**), impacts to water quality standards would be less than significant.



**Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level?**

Construction of the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. An EVMWD water service connection would be used to supply the water for construction activities. This relatively small amount of water would be supplied from the EVMWD system of groundwater, surface water, and imported water. Therefore, the Proposed Project would result in no impact to groundwater supplies through depletion.

The Proposed Project Site partially overlies the Warm Springs Valley hydrologic subbasin (alluvium) and partially non-water bearing bedrock. The size of the proposed substation footprint (2.3 acres) is very small compared to the area of the Warm Springs Valley Subbasin and the ability of precipitation to infiltrate into most of the 2.3 acres is maintained. The small project footprint would not inhibit recharge to the subbasin. Therefore, construction of the Proposed Project would not impact groundwater resources.

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

Construction of the Proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site after implementation of the Construction SWPPP (see HYDRO-SCE-1). Surface water flow on the site is presently overland on native soil with a less than one percent ground slope generally to the east and northeast. A small arroyo-type drainage swale occupies the northeast corner of the property, most of which lies outside of the Proposed Project Site. Final site grades will maintain a slight slope to the east and necessitate filling the low area of the swale blocking flow from up stream. This will require construction of a flow by-pass to maintain the small amount of runoff now continuing across this area. Although water use generated on the site will be very small, SCE proposes to construct a small on-site fenced retention basin on the east side of the property to contain precipitation- and man-made runoff so that it does not exit the developed area. Once a local storm runoff system is functional near the site, the storm water runoff from the substation may or may not then be diverted to that system.

There are no named or otherwise identified USGS blueline streams or rivers that cross, or come into contact with the Proposed Project Site, thus no stream or river would be altered in a manner that results in substantial erosion or siltation, on or off site, nor would storm water be directed into such resources.

Construction related impacts are considered less than significant after implementation of the Construction SWPPP (see HYDRO-SCE-1).

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

As stated in the immediately previous subsection, the Proposed Project would not alter the existing drainage pattern of the site or area. Therefore, construction related impacts associated with on- or off-site flooding are less than significant.

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

Construction of the Proposed Project would not create or contribute to runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Storm water erosion control measures would be implemented for all areas cleared for construction of the Proposed Project. A small retention basin would be constructed on the site in order to impound runoff and reduce erosion.

In addition, a notice of intent to comply with the Storm Water General Permit requirements for Construction activities would be submitted to the SARWQCB and a SWPPP would be prepared and implemented to ensure consistency standards and discharge requirements. All activities would be subject to storm water control requirements defined in the NPDES permit and SWPPP. Construction impacts for the short subtransmission line would generally be the same as described above for proposed substation site. Pursuant to the permitting process, impacts associated with runoff water and polluted runoff would be less than significant.

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

Construction of the Proposed Project would not substantially degrade water quality after implementation of the Construction SWPPP (see HYDRO-SCE-1, -2, and -3). As stated previously, permit requirements would ensure water quality be maintained at acceptable levels. Thus, impacts related to substantial water quality degradation are less than significant.

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

The Proposed Project would not place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. The Project site is not within a designated 100-year or 500-year flood zone, or a dam failure flood inundation zone; therefore no flooding impacts are associated with the Proposed Project.

**Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

As stated in the immediately previous subsection, the Proposed Project is not within a designated 100-year or 500-year flood zone, or a dam failure flood inundation zone. Construction of the Proposed Project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area; therefore no flooding impacts are associated with the Proposed Project.

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

The Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of failure of a levee or dam. The site is not within a designated flood zone and is not downstream from a dam; therefore no flooding impacts are associated with construction of the Proposed Project.

**Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

The Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. Due to the topographic position, geologic conditions, and lack of nearby or up slope water bodies, inundation by seiche, tsunami, and mudflow cannot create an impact related to construction of the Proposed Project.

#### **Applicant Proposed Measures**

**HYDRO-SCE-1:** A SWPPP (for Construction and Operations) would be submitted to Riverside County along with grading permit applications. Implementation of the Plan would help stabilize graded areas and water courses, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled, and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the Construction SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.

**HYDRO-SCE- 2:** An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and Construction SWPPP measures, to all field personnel. A formal monitoring program would be implemented to ensure that the plans are followed throughout the construction period.

**HYDRO-SCE-3:** The Construction SWPPP would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP 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.

### **Mitigation Measures**

Because construction of the Proposed Project after implementation of the Applicant Proposed Measures would result in less than significant impacts to hydrology and water quality, no mitigation measures are required.

#### **4.8.4.2 Operation Impacts**

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

Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements after implementation of the Operations SWPPP (see HYDRO-SCE-1, -2, and - 3). Once operational, the substation would be periodically maintained. However, these activities would not impact hydrologic resources within or adjacent to the proposed substation. As a result, impacts associated with hydrology and water quality would be less than significant after implementation of design measures and after regulatory compliance.

##### **Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level?**

Operation of the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge leading to a net deficit in aquifer volume or a lowering of the local ground water table level. Water from the City of Lake Elsinore water system would be used for landscape irrigation. This water usage would be minimal and therefore, is not considered a significant impact. No groundwater or surface water resources would be impacted nor would any subsequent structures be placed on site or result in activities that could adversely impact or be impacted by site or neighboring hydrology. Therefore, the impacts are less than significant.

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

The Proposed Project would not substantially alter the existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site. As state above, after implementation of the Operations SWPPP (see HYDRO-SCE-1, -2, and - 3) associated maintenance activities would not impact these drainage resources. Thus, the operation impacts regarding alteration of the course of a stream or river are considered less than significant.

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

The Proposed Project would not substantially alter the existing drainage pattern in a manner that would result in a substantial increase in the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. As state previously, once operational, associated maintenance activities would not impact hydrologic resources. Therefore, impacts associated with flooding on- or off-site are less than significant.

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

Operation of the Proposed Project would not create or contribute to runoff water that would exceed the capacity of existing or planned storm water drainages systems or provide substantial additional sources of polluted runoff. Runoff volumes are not forecasted to be substantial. The runoff, therefore, would not exceed the capacity of the proposed retention basin or planned storm water drainage systems. An on-site retention basin would be constructed to minimize runoff from the Proposed Project. Therefore, impacts associated with storm water capacity and polluted runoff would be less than significant.

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

The Proposed Project would not substantially degrade water quality. Once in operation and after implementation of the Operations SWPPP (see HYDRO-SCE-1, -2, and - 3), the substation would comply with all of the SARWQCB water quality standards and/or drainage discharge requirements. Thus, impacts related to substantial water quality degradation are less than significant.

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

Operation of the Proposed Project would not place housing within a 100-year floodplain as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. The Proposed Project Site is not within a designated 100-year or 500-year flood zone; therefore no operation impacts are associated with the Proposed Project.

**Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

Operation of the Proposed Project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area. The site is not within a designated flood zone and is not downstream from a dam; therefore operation of the Proposed Project does not create flooding impacts.

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

Operation of the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of failure of a levee or dam. As stated previously, the site is not within a designated flood zone and is not downstream from a dam; therefore operation of the Proposed Project does not create flooding impacts.

**Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

Operation of the Proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow. Due to the topographic position, geologic conditions, and lack of nearby or up slope water bodies, inundation by seiche, tsunami, and mudflow cannot create an impact related to operation of the Proposed Project.

**Applicant Proposed Measures**

SCE would implement Applicant Proposed Measures, (HYDRO-SCE-1, -2, and - 3), as discussed above, to reduce potential impacts from hydrology and water quality to less than significant levels.

**Mitigation Measures**

Because operation of the Proposed Project after implementation of the Applicant Proposed Measures would not result in significant impacts to hydrology and water quality, no mitigation measures are required.



### 4.8.5 ALTERNATIVES

#### **Alternative Project Site B**

Alternative Site B fronts the western side of Terra Cotta Road immediately across the street (a 90 foot ROW) from the Proposed Project Site. All of the location attributes of the Proposed Project Site pertaining to surface drainage features and basin location and subsurface groundwater basins locations and structure also apply to the Alternative Site B location. Subsequently, the Alternative Site B location impacts would be the same as the Proposed Project.

#### **Alternative Project Site C**

Alternative Site C is located approximately 1,750 feet east of the Proposed Project Site on the southeast side of Nichols Road. Alternative Site C is relatively flat on the northwest and has slightly steeper terrain than the Proposed Project Site in the southeast with a blue line stream crossing it's the middle portion. There is a less well-entrenched branch drainage a few hundred feet southeast of the blue line stream. Development in the southeast portion of Alternative Site C would require more excavation than at the Proposed Project site to achieve the proposed site grades, thereby increasing somewhat the potential to generate loose material that could lead to sedimentation off-site. Soils are similar at each site with regard to permeability and infiltration of surface runoff, and each site is in the same groundwater subbasin and watershed. The northwest portion of Alternative Site C is situated in an alluvial valley similar to the Proposed Project Site. If more fill is required for development in the northwest this would have a similar, or slightly greater, impact than the Proposed Project with respect to surface hydrology impact on blue line drainage, whereas development in the southeast would have less impact. Site Alternative C is located in close proximity to a blue line drainage southeast of the site alternative. This drainage could pose engineering and construction problems if unavoidable. Overall, the hydrology and surface water quality impacts at Alternative Site C are also considered less than significant after implementation of the Construction and Operations SWPPP (see HYDRO-SCE-1, -2, and -3), but may be slightly greater than the Proposed Project if facilities are located in the northwest portion and slightly less if located in the southeast portion.

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County of Riverside, 2003, General Plan-Hearing Draft (Figures S-1 through S-10) and the General Plan EIR adopted October 3, 2003.

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## 4.9 Land Use and Planning

### 4.9.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

This City of Lake Elsinore is located in the southwestern part of Riverside County, east of the Elsinore Mountains and the Santa Ana Mountains. The City of Lake Elsinore contains approximately 38.8 square miles, including Lake Elsinore, a freshwater lake that is approximately 3,538 acres in size (as summarized by SCAG 2001, and as reported in the Land Use and Recreation Background Report, Lake Elsinore General Plan Update, January 2006).

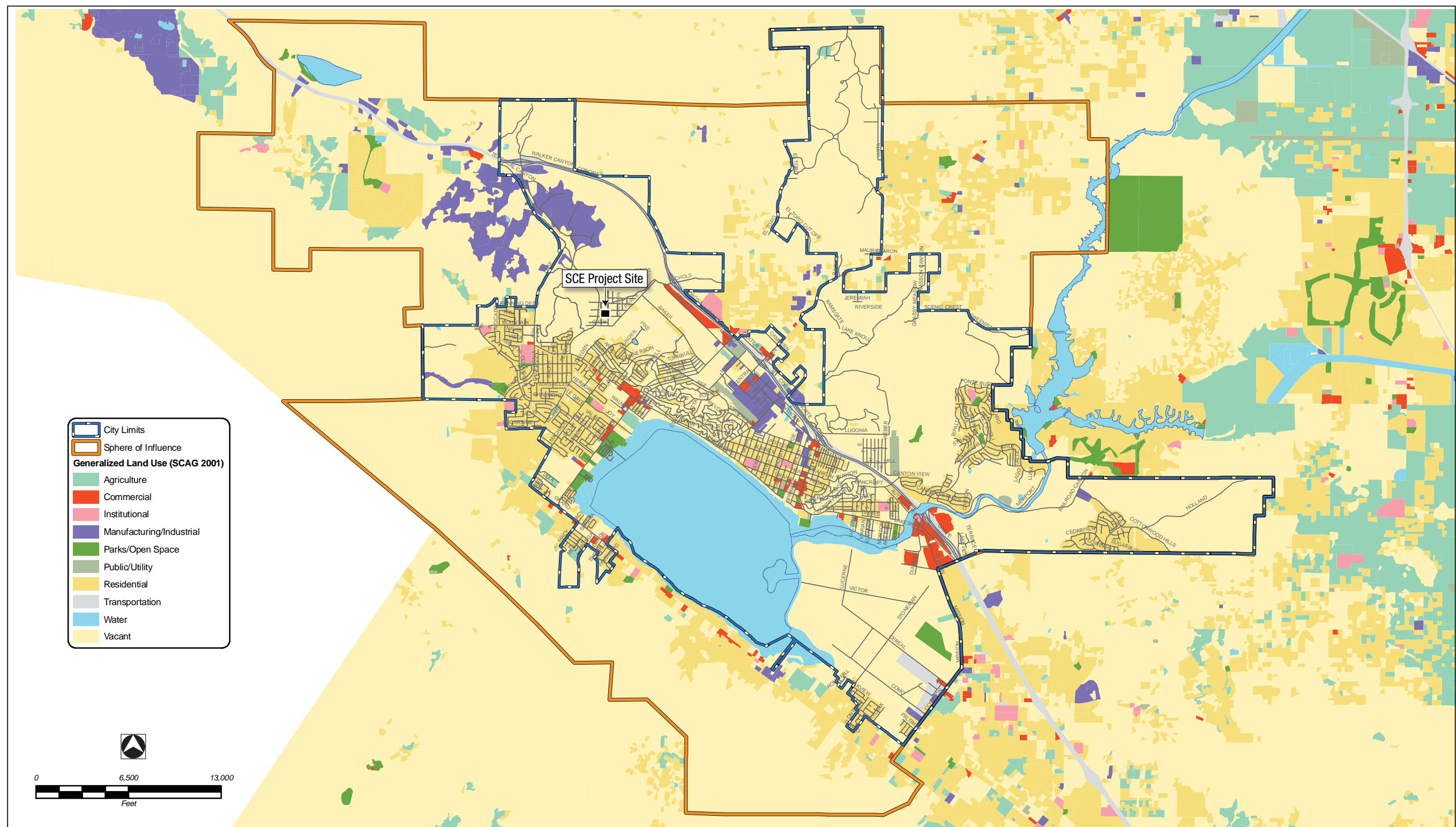
Land uses within the City of Lake Elsinore are governed by the policies contained in the City's existing General Plan (adopted in 1970). The City has recently updated its General Plan (Lake Elsinore General Plan Update, January 2006). The Land Use and Recreation Chapter of the General Plan Update provides the policy outlines designed to meet the City's Land Use planning objectives. Land uses within the 78.3 square mile sphere of influence (SOI) of the City and areas immediately adjacent are subject to the provisions of the County of Riverside's Elsinore Area Plan. Land uses within these areas are governed by policies elaborated in the County of Riverside General Plan. The General Plan contains the County's "Strategic Vision" that serves to provide general policies and guidelines for development within the County's cities and towns.

The general land uses within the city boundaries and sphere of influence are illustrated in **Figure 4.9-1, Generalized Existing Land Use**. The City of Lake Elsinore has 14 Specific Plan Areas, which cover approximately two-thirds of the City (see **Figure 4.9-2, Specific Plans in Lake Elsinore**). Local and regional plan boundaries and zoning designations described in this section are shown in **Figure 4.9-3, Existing General Plan Designations**.

A summary of existing land uses in the City of Lake Elsinore is presented in **Table 4.9-1, Existing Land Uses within the City of Lake Elsinore**. A total of nearly 80% of the land within the City is either vacant and undeveloped (64.6%) or within Lake Elsinore (14.3%). Residential is the only major developed land use, accounting for 12.7% of existing land uses within the City. The other land uses such as agricultural, commercial, institutional, manufacturing/industrial, parks/open space, public/utility, and transportation account for small percentages of the remaining existing land uses.

The SCAG 2001 Land Use Database was utilized to evaluate the existing land uses within the Lake Elsinore sphere of influence including the City. Based on the SCAG data the entire sphere of influence had a total of 50,103 acres. Vacant, undeveloped land and water accounted for 76% of existing land uses. Residential uses accounted for 16.2% of the area and manufacturing/industrial accounted for 2.8% of the land area. The remaining 5% of the sphere of influence land area was devoted to agricultural, commercial, institutional and other land uses.

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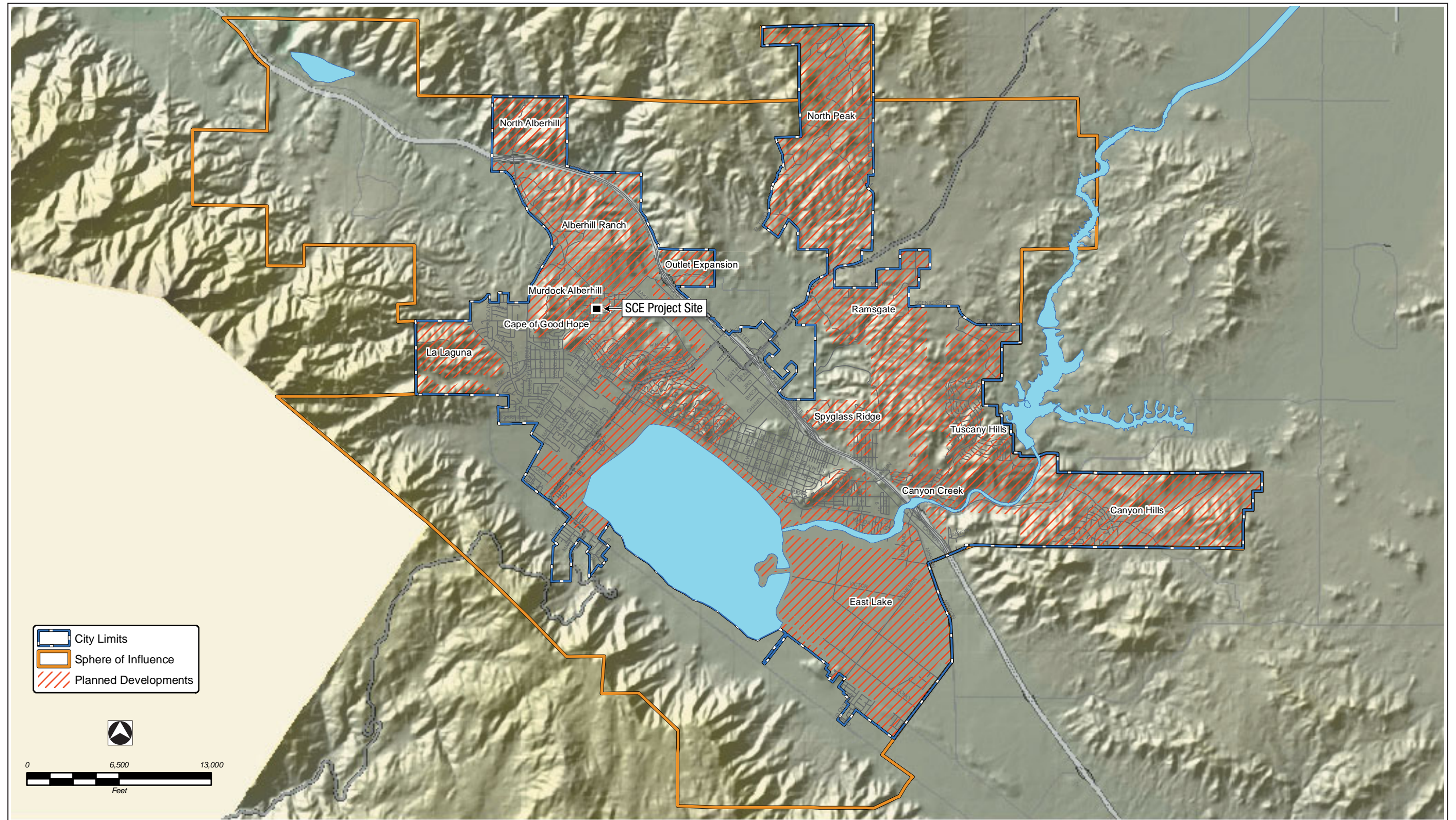
## Generalized Existing Land Use

FIGURE 4.9-1



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Source: City of Lake Elsinore, County of Riverside, Mooney-Jones & Stokes, 12-01-05

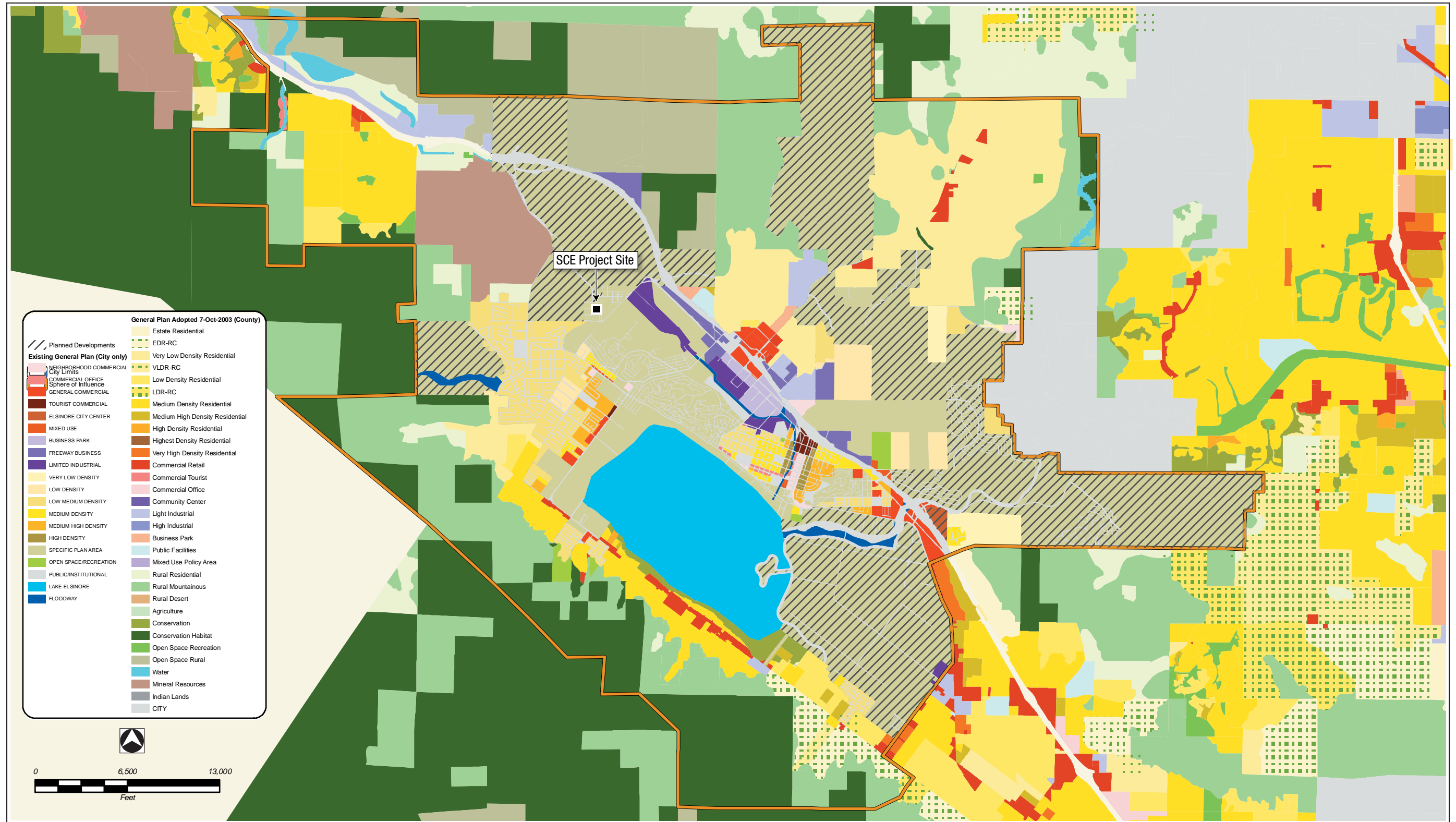
Revision date: February 14, 2007

## Specific Plans in Lake Elsinore

FIGURE 4.9-2



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## Existing General Plan Designations

FIGURE 4.9-3

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<b>Table 4.9-1: Existing Land Uses within the City of Lake Elsinore*</b>		
<b>Existing Land Use</b>	<b>Acres</b>	<b>Percent of City Area</b>
Agriculture	102.04	0.41
Commercial	368.03	1.48
Institutional	111.09	0.45
Manufacturing/Industrial	653.80	2.63
Parks/Open Space	267.11	1.10
Public/Utility	132.80	0.54
Residential	3,147.31	12.68
Transportation	465.61	1.88
Vacant	16,029.46	64.60
Water	3,537.50	14.26
<b>Total</b>	<b>24,814.75</b>	<b>100.00</b>
*SCAG 2001/City of Lake Elsinore General Plan Update Technical Background Report, January 2006.		

Land use planning in the City of Lake Elsinore encounters constraints from natural environmental factors such as flood hazards, steep slopes, endangered species and habitat, unstable slopes, liquefaction and active faults. Another constraint is that specific plan land use designations cover 66% of the land area within the City.

The Proposed Project Site is in an area covered by a R-1 zoning designation. According to the City of Lake Elsinore zoning code, the R-1 district is intended to accommodate low density projects comprised of quality single-family residences developed in an urban environment with available public services and infrastructure. The zoning code for the R-1 designation also includes a number of permitted uses. One of the permitted uses is public utility distribution and transmission facilities excluding private radio, television, and paging antenna and towers.

The Proposed Project Site lies in a portion of the City subject to a number of "specific plans". The Proposed Project Site is situated immediately southeast of the Alberhill Specific Plan and north of the approved Lakeside Palms residential development. The Proposed Project Site falls within an area generally identified as being part of the future Specific Plan J area, for Country Club Heights, that lies within a single-family residential district (zoned R-1).

A number of new residential developments have either been approved or proposed in the vicinity of the Project site. The City has recently approved the following residential projects: Alberhill Ranch, North Alberhill, La Laguna Estates and Brighton/Alberhill. In addition, the Lakeside Palms residential development (TT#327876) has recently been proposed in the vicinity of the Proposed Project Site.

There are currently two single-family residences, a residential trailer and miscellaneous auxiliary structures on adjacent parcels north and south of the Proposed Project Site. Another adjacent parcel contains the remnants of the foundation of a single-family residence. The majority of the area surrounding the Proposed Project Site is currently vacant land with the exception of the Dryden Substation which is a temporary facility located west of Terra Cotta Road. There are



### 4.9 Land Use and Planning

also some dispersed single-family residences southeast of the Proposed Project Site along Terra Cotta Road.

#### 4.9.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

##### **Federal**

Land use is regulated at the regional and local level. There are no Federal land use regulations applicable to the Proposed Project.

##### **State**

The California Public Utilities Commission (CPUC) General Order (GO) No. 131-D, Section XIV B clarifies that “Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission’s jurisdiction. However in locating such projects, the public utilities shall consult with local agencies regarding land use matters.” Due to this GO, the public utilities are directed to consider local regulations and consult with local agencies, but the county and city regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project.

##### **Local**

##### ***Riverside County***

*Riverside County General Plan.* The County of Riverside GP provides the County’s “Strategic Vision” and general broad policies as guidelines for development within its cities. The General Plan is relied on to provide direction when making future land use and public service decisions. All community plans, specific plans, subdivisions, public works projects, and zoning decisions must be consistent with the County’s General Plan. The County of Riverside has also adopted 19 area plans (replacing previously adopted Community Plans) as well as the Riverside Extended Mountain Area Plan and the Southwest Area Plan. The applicable County Land Use Policies are as follows:

*Riverside County General Plan. Policies. Policy LU 1.11c* “A proposal to add a Public Facilities designation within a “Rural Community” or “Rural” Specific Plan shall not be considered a Foundation-level change.”

*Riverside County General Plan. Policies. Policy LU 5.2* “Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.”

*Riverside County General Plan. Policies. Policy LU 5.4* “Ensure that development and conservation land uses do not infringe upon existing public utility corridors, including fee owned right-of way and permanent easements, whose true land use is that of “public facilities.” This policy will ensure that the “public facilities” designation governs over what otherwise may be inferred by the large scale general plan maps.”

For the purpose of addressing sub-regional portions of its large geographical area Riverside County has prepared a series of Area Plans. The Elsinore Area Plan (Volume I) designates land uses and overlay zones that address development issues relating to Open Space, Agriculture, Rural, Rural Community and Community Development land use categories. Additional County documents governing and influencing land use include the Riverside County Vision and Planning Principles, the Community and Environmental Transportation Acceptability Process (CETAP), the Multiple Species Habitat Conservation Plan (MSHCP), and Riverside County zoning regulations.

The Proposed Project is located within a Western Riverside County MSHCP Criteria cell. A criteria area is comprised of cells identified in the MSHCP. Cells are defined as units within a criteria area generally 160 acres in size, approximately one-quarter section. The City of Lake Elsinore is responsible for adopting the MSHCP and establishing procedures and requirements for the implementation of its terms and conditions.

The City of Lake Elsinore Community Development Department, Planning Division requires the completion of a Property Owner Initiated Application in order to establish MSHCP consistency. If any part of a proposed project lies within a MSHCP Criteria Cell, then the application serves to initiate the Lake Elsinore Acquisition Process (LEAP). However, SCE is a *“Participating Special Entity”* under the implementation agreement, and as such SCE is not required to file a request for consistency with the City of Lake Elsinore. Instead, SCE participates in the plan at its discretion by evaluating proposed project sites for species covered by the MSHCP. These impacts are addressed in Section 4.4, Biological Resources.

### **City of Lake Elsinore**

*City of Lake Elsinore General Plan.* The last General Plan Update for the City of Lake Elsinore was completed in 1990 and is in the process of being updated. The General Plan Update is being developed in response to the rapid growth that has occurred in the City of Lake Elsinore. The General Plan Update will contain goals, objectives, and policies that will guide development in the City and sphere of influence, and reflect the community’s vision for the future. The General Plan Update includes the following three documents: 1.) Land Use Policies used to describe guiding principles; 2.) Background Report assessing existing conditions; and 3.) An Environmental Impact Report that is used to determine the impact that changes resulting from the updated General Plan will have in the City. The General Plan Update is expected to be completed by June 2007.

### **4.9.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to land use and planning come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Physically divide an established community
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

### 4.9 Land Use and Planning

- Conflict with any applicable habitat conservation plan or natural community conservation plan

#### 4.9.4 IMPACT ANALYSIS

##### 4.9.4.1 CONSTRUCTION IMPACTS

##### **Would the project physically divide an established community?**

Construction of the Proposed Project would not physically divide an established community within the City of Lake Elsinore. The City of Lake Elsinore zoning code for the R-1 designation permits public utility distribution and transmission facilities excluding private radio, television, and paging antenna and towers.

Construction impacts of the Proposed Project are considered short-term and temporary. Construction crews would be present at the Proposed Project Site during the construction period. Building materials and construction equipment would be stored at the site during the construction period. This would represent a change from the current, vacant land use. However, since most of the parcels in the vicinity of the Proposed Project are vacant, these activities are not expected to have a significant impact on surrounding land uses. As a result, construction impacts on divisions within established communities would be less than significant.

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

Construction impacts of the Proposed Project are considered short-term and temporary and would not conflict with any applicable environmental plans, policies, or regulations of an agency with jurisdiction over the project (including, not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. As a result, the land use and planning impacts from the construction of the Proposed Project on applicable plans, policies and regulations would be less than significant.

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

Construction of the Proposed Project would not conflict with any applicable habitat conservation plan (such as the Riverside County Multi-Species Habitat Conservation Plan) or natural community conservation plan. The Proposed Project is located within a MSHCP Criteria Cell. SCE is a *“Participating Special Entity”* under the implementation agreement, and as such SCE is not required to file a request for consistency with the City of Lake Elsinore. However, as discussed in Section 4.4, Biological Resources, construction of the Proposed

Project would not significantly impact any species covered by the MSHCP. The land use impacts on these plans from construction are expected to be less than significant.

**Applicant Proposed Measures**

Because construction of the Proposed Project would result in less than significant impacts to land use, no applicant proposed measures are provided.

**Mitigation Measures**

Because construction of the Proposed Project would result in less than significant impacts to land use, no mitigation measures are required.

**4.9.4.2 Operation Impacts****Would the project physically divide an established community?**

The operation of the Proposed Project would not physically divide an established community within the City of Lake Elsinore. The Proposed Project would represent a change from the current vacant land use. Most of the parcels in the vicinity of the Proposed Project are vacant and are planned for future residential development. The development of the Proposed Project would be supportive of that residential development and would not divide an established community. As a result, the Proposed Project is not expected to have a significant impact on surrounding land uses and operational impacts on divisions within established communities would be less than significant.

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

The Proposed Project would not conflict with any applicable environmental plans, policies, or regulations of an agency with jurisdiction over the project (including, not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. As a result, the land use and planning impacts from the operation of the Proposed Project on applicable plans, policies and regulations would be less than significant.

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

The Proposed Project is located within a Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) Criteria cell. SCE is a *“Participating Special Entity”* under the implementation agreement, and as such SCE is not required to file a request for consistency with the City of Lake Elsinore. Regardless, as discussed in Section 4.4, Biological Resources, operation of the Proposed Project would not significantly impact any species covered by the

##### 4.9 Land Use and Planning

MSHCP. Operation of the Proposed Project would not conflict with the provisions of an adopted HCP.

##### **Applicant Proposed Measures**

Because operation of the Proposed Project would result in less than significant impacts to land use, no applicant proposed measures are provided.

##### **Mitigation Measures**

Because operation of the Proposed Project would result in less than significant impacts to land use, no mitigation measures are required.

#### **4.9.5 ALTERNATIVES**

##### **Alternative Project Site B**

Alternative Site B would consist of a development parcel of essentially the same size and configuration fronting the western side of Terra Cotta Road immediately opposite the Proposed Project Site. The R-1 zoning of Alternative Site B, its location with respect to future Specific Plan J and the similarity of the existing adjacent and proximal land uses to those of the Proposed Project indicate that the potential land use impacts with Alternative Site B would be nearly identical to those of the Proposed Project. The primary difference between the two sites is that Alternative Site B is located in terrain that would have a greater range in local relief requiring the creation of cut slopes during grading to provide a level substation site. Impacts to land use and planning are expected to be less than significant under Alternative Site B..

##### **Alternative Project Site C**

Alternative Site C is located approximately 1,750 feet east of the Proposed Project. The 12.3 acre site is located in an area that is designated under the City of Lake Elsinore zoning code as M-1 for Limited Manufacturing District. The intent of this designation is to provide for light industrial uses that are free of hazardous characteristics and “to protect those areas from intrusion by residential, commercial and other inharmonious uses.” The development of an electrical substation is not specifically listed as a permitted use within this category. A number of single-family uses abut the southern end of Alternative Site C. Impacts to land use and planning are expected to be less than significant under Alternative Site C.

#### **4.9.6 REFERENCES AND COMMUNICATIONS**

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## 4.10 Mineral Resources

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### 4.10.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975. Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits. The MRZ categories follow:

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence
- **MRZ-2:** Areas where adequate information indicates significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence
- **MRZ-3:** Areas containing mineral deposits the significance of which cannot be evaluated from available data
- **MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ

The MRZ classifications are applied based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data. The designations are also based on socioeconomic factors, such as market conditions and urban development patterns.

The Proposed Project site itself is classified as MRZ-3. Soils comprising the Proposed Project site are older alluvium with a trace of younger alluvium along a drainage swale that cuts diagonally through the property<sup>1</sup>. The Proposed Project site is not currently utilized, nor has it been in the past utilized, for mineral extraction.

### **Geothermal Resources**

Riverside County's principal renewable geologic resource is geothermal resources. Geothermal resources associated with elevated heat flow along the Elsinore Fault Zone have been known for some time. Native Americans and early settlers are believed to have used the area's hot springs, and in the 19<sup>th</sup> century, the Town of Elsinore (now the City of Lake Elsinore) became famous for its sulfur waters, which supported a local spa industry. The region's largest hot springs are at Murrieta Hot Springs near Temecula, along the principal trace of the Elsinore fault. Smaller hot springs are present in a number of places along splay faults (Norris and Webb 1990). Geothermal resources in the Project Area have not been developed for power production, although the County General Plan (County of Riverside 2003) identifies some potential for such development.

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<sup>1</sup> Geologic Map Alberhill Ranch, Alberhill Area, Dated January 1988 prepared by G.A. Nicoll & Associates, Inc./ Alberhill Specific Plan Amendment dated January 1992.

**4.10 Mineral Resources**

**Oil and Gas**

There are no known oil or gas reserves identified in or within 15 miles of the Project Area (City of Lake Elsinore 2006, State of California 2001).

**4.10.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

**Federal**

There are no Federal regulations applicable to the Proposed Project.

**State**

There are no State regulations applicable to the Proposed Project.

**Regional and Local**

***County of Riverside***

Riverside County designates lands as Open Space-Mineral Resource based on the federal Surface Mining Control and Reclamation Act (SMARA). Areas held in reserve for future mining also fall under this designation. Ancillary structures or uses may be permitted that assist in the extraction, processing, or preservation of minerals. Actual building structure size, siting, and design are determined on a case-by-case basis.

The following policies apply to properties designated as Open Space-Mineral Resources.

**LU 21.2:** Protect lands designated as Open Space-Mineral Resources from encroachment of incompatible land uses through buffer zones or visual screening

**LU 21.3:** Protect road access to mining activities and prevent or mitigate traffic conflicts with surrounding properties

**4.10.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to mineral resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
- Result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

#### **4.10.4 IMPACT ANALYSIS**

##### **4.10.4.1 Construction Impacts**

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

Construction of the Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The SMARA established the mineral resource classification system, which is used to determine an area's mineral resource value. The Proposed Project site is located in an area classified as MRZ-3. The Proposed Project is not located on land known to contain an important mineral resource. Therefore, no impact to mineral resources would occur during the construction of the Proposed Project.

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

Construction of the Proposed Project would not result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As stated above, the proposed project is located in an area classified as MRZ-3, an area containing no important minerals. Therefore, this area does not contain locally important mineral resources recovery sites, and thus there are no impacts associated with resource recovery sites.

##### **Applicant Proposed Measures**

Because construction of the Proposed Project would result in no impact to mineral resources, no applicant proposed measures are provided.

##### **Mitigation Measures**

Because construction of the Proposed Project would result in no impact to mineral resources, no mitigation measures are required.

##### **4.10.4.2 Operation Impacts**

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

Operation of the Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The SMARA established the mineral resource classification system, which is used to determine an area's mineral resource value. The Proposed Project site is located in an area classified as MRZ-3. The Proposed Project is not located on land known to contain an important mineral resource. Therefore, no impact to mineral resources would occur during the operation of the Proposed Project.

**4.10 Mineral Resources**

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

Operation of the Proposed Project would not result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As stated above, the Proposed Project is located in an area classified as MRZ-3, an area containing no important minerals. Therefore, this area does not contain locally important mineral resources recovery sites and, thus there is no impact associated with resource recovery sites.

**Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impact to mineral resources, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation of the Proposed Project would result in no impact to mineral resources, no mitigation measures are required.

**4.10.5 ALTERNATIVES**

**Alternative Project Site B**

As Alternative B would construct and operate a substation identical to, and in a location immediately west of the proposed Fogarty Substation Project site, its impacts upon mineral resources would be similar in all respects. Alternative B would result in no impact to mineral resources.

**Alternative Project Site C**

As with the Proposed Project, Alternative C is not located on land known to contain an important mineral resource. Its impacts upon mineral resources would be similar in all respects. Alternative C would result in no impact to mineral resources.

**4.10.6 REFERENCES AND COMMUNICATIONS**

Lake Elsinore General Plan Update, Geology and Mineral Resources Background Report, dated January 2006.

Alberhill Specific Plan Amendment dated January 1992.

## 4.11 Noise

### 4.11.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### General Noise Information

Noise is generally defined as unwanted or objectionable sound, and airborne sound can be described as a rapid fluctuation of air pressure above and below the atmospheric pressure. Most sounds that humans hear in the environment consist of a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a filter that reflects the fact that human hearing is less sensitive at low and extreme high frequencies compared to mid-range frequencies. This is called “A” weighting, and the decibel level measured is called the A-weighted sound level (dBA).

Expressed on a logarithmic (power of 10) scale the units are depicted as dBA using a frequency-weighted pattern that duplicates the sensitivity of the human ear. A noise of 70 dBA is approximately twice as loud as a noise of 60 dBA and four times as loud as a noise of 50 dBA. **Table 4.11-1, Definition of Acoustical Terms Used in this PEA** defines acoustical terms used in this PEA.

Since noise levels from various sources vary over time, they are frequently expressed as an equivalent noise level ( $L_{eq}$ ), which is a computed steady noise level that represents the same energy transmission over a specified time.  $L_{eq}$  values are commonly expressed for one-hour periods, but different averaging times may be specified.

For the evaluation of environmental or community noise effects, it is customary to define a 24-hour-long noise level based on hourly  $L_{ed}$  values, and to apply an excess or “penalty” noise during the nighttime hours to account for the added nuisance during those periods and to adjust for lower average ambient levels during that period. Depending on the exact penalty scheme, the resulting noise descriptor is either a Community Noise Equivalent Level (CNEL) or a Day-Night Average Noise Level ( $L_{dn}$ ). The two ways of expressing such noise levels are nearly equivalent, and are often used interchangeably.



**Table 4.11-1: Definition of Acoustical Terms Used in this PEA**

Terms	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure; the reference pressure for air is 20
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network; the A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise
Equivalent Noise Level, $L_{eq}$	The average A-weighted noise level during the measurement period. The hourly $L_{eq}$ used for this report is denoted as dBA $L_{eq [h]}$
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 PM to 10:00 PM and after addition of 10 decibels to sound levels in the night between 10:00 PM and 7:00 AM
Day/Night Noise Level, $L_{dn}$	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 PM and 7:00 AM
$L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location
SOURCE: CALTRANS 1998.	

### **Ground-borne Vibration**

Vibrating objects in contact with the ground radiate energy through the ground. Large and/or powerful vibrating objects can be perceptible by humans and animals. The rumbling sound caused by the vibration of room surfaces is called ground-borne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and in the United States is referenced as vibration decibels (VdB) (Caltrans 1998).

The background vibration velocity level in residential and educational areas is usually approximately 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible

indoor vibration is caused by sources within buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, and 100 VdB, which is the general threshold where minor damage can occur in fragile buildings (Caltrans 1998).

### ***Project Area***

The Proposed Project Site is situated in the northwestern part of the City of Lake Elsinore. The property occupies the southeastern corner of the intersection of Terra Cotta Road and Kings Highway. Terra Cotta road is a two-lane dirt road and Kings Highway is an easement for a non-existent paper street. Easements for non-existent streets also border the southern side (Hoff Avenue) and western side (Dobbler Avenue) of the proposed project site. The Proposed Project Site consists of an approximate 6.6 acre parcel of vacant land having an easterly slope and an east-west oriented rectangular shape as measured from the center line of the ROW of the adjacent streets. Within the 6.6 acres is the substation footprint (area contained within the perimeter wall) that covers approximately 2.3 acres, 1.4 acres of easements and setbacks, and a 1.0 acre property segment extending east that would not be developed as part of the Proposed Project, and approximately 1.9 acres of future road ROWs surrounding the proposed substation site.

The 2.3 acre Fogarty Substation would have a setback that would be effectively measured at 25 feet from the ROW for Terra Cotta Road (an existing improved dirt road to the west). To the substation's south the set back from the ROW Hoff Avenue (a non-existent street) would be 20 feet, and to the north the setback from the ROW for Kings Highway (also a non-existent street) would be 34 feet. Along the eastern, rear side of the substation a 58 foot wide easement would be maintained to accommodate the overhead access to the Valley-Elsinore-Ivyglen 115kV subtransmission line. A 1.0 acre property segment extending east of the substation would not be developed for substation purposes.

### ***Sensitive Receptors***

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion, and therefore have more stringent noise exposure targets.

The closest potentially sensitive receptors consist of single-family residences. One single-family residence lies north of the Proposed Project Site, on the northern side of the Kings Highway ROW, and a second single-family residence lies south of the Proposed Project Site on the southern side of the ROW for Hoff Avenue. The remainder of the site abuts vacant land. A temporary electrical substation (Dryden Substation) is located west of Terra Cotta Road, directly opposite of the Proposed Site.

### ***Results of Background Noise Survey***

A short-term noise measurement was made on August 2, 2006, at three locations on and around the Proposed Site. Sounds identified on-site were caused by a few vehicles passing the site via Terra Cotta Road, the sounds of distant construction, and birds in the immediate vicinity. The results of the measurements are shown below in **Table 4.11-2, Existing Noise Measurements at the Proposed Project Site**.

<b>Table 4.11-2: Existing Noise Measurements at the Proposed Project Site*</b>			
<b>Location of measurement</b>	<b>Avg. dB</b>	<b>Max. dB</b>	<b>50-percent</b>
On-site near project driveway entrance	50	62	47
Closest residence (south of the Hoff Avenue ROW)	50	60	46
Closest residence (north of the Kings Highway ROW)	42	46	41
* Noise sources consisted of a few vehicles on Terra Cotta Road, distant construction, and birds.			

If baseline levels were higher from background sources such as a freeway or major arterial, the applicable noise standard would be adjusted upward since the facility would not be held to a stricter standard than what already exists. However, based upon the above measurements the background noise level is not high enough to warrant an adjustment of the steady-state noise standard, which is 40 dB for the Proposed Project.

#### **4.11.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

##### **Federal**

There are no applicable Federal regulations, plans or standards.

##### **State**

There are no applicable State regulations, plans or standards.

##### **Regional and Local**

The City of Lake Elsinore includes in its General Plan/Noise Element a Noise and Land Use Compatibility Matrix that has been adopted and slightly modified from the State of California guidelines (**Figure 4.11-1, Noise and Land Use Compatibility Matrix**). The standards shown in the Matrix are the noise levels that are considered compatible with a given acoustic environment.

Allowable noise levels from a “stationary” source such as a substation crossing an adjacent property line is governed by the City of Lake Elsinore Municipal Code.

LAND USE CATEGORIES		DAY-NIGHT NOISE LEVEL LDN						
CATEGORIES	USES	< 55	60	65	70	75	80 >	
Residential	Single Family, Duplex, Multiple Family	A	A	B	B	C	D	D
Residential	Mobile Home	A	A	B	C	C	D	D
Commercial Regional District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Recreational Institutional Civic Center	Amphitheatre, Concert Hall  Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreational	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Whole sale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, School classrooms	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Courses, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Source: City of Lake Elsinore General Plan, 1995

Revision date: February 14, 2007

#### Notes:

**Zone A. Clearly Compatible** - Specified land use is satisfactory, based upon the assumption that any building involved are of normal conventional construction without any special noise insulation requirements.

**Zone B. Normally Compatible** - New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

**Zone C. Normally Incompatible** - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

**Zone D. Clearly Incompatible** - New construction or development should generally not be undertaken.

## Noise and Land Use Compatibility Matrix

FIGURE 4.11-1

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The allowable noise levels at off-site single-family properties at the property line are listed in **Table 4.11-3, Allowable Noise Levels for Single Family Residential Properties** below (Code Section 17.78.060, Table 1).

<b>Table 4.11-3: Allowable Noise Levels for Single Family Residential Properties</b>		
<b>No more than:</b>	<b>10 p.m. – 7 a.m.</b>	<b>7 a.m. – 10 p.m.</b>
30 minutes	40 dB	50 dB
15 minutes	45 dB	55 dB
5 minutes	50 dB	60 dB
1 minute	55 dB	65 dB
0 minutes	60 dB	70 dB

Construction noise is typically governed by ordinance limits on allowable times of equipment operations. The City of Lake Elsinore has additionally developed construction equipment noise performance standards that exactly define “temporary” and “substantial.” Construction noise impacts will be less-than-significant if they comply with the applicable ordinance limits. The Lake Elsinore Municipal Code restricts and regulates hours of construction operation and levels of construction noise. In Chapter 17.78, Section 17.78.080 (F), construction noise is restricted from 7:00 p.m. to 7:00 a.m. weekdays and at any time on weekends or holidays when it creates a noise disturbance across a residential or commercial property line. Section 17.78.080 (F) (2) regulates construction activity noise levels as follows:

- B. Noise Restrictions at Affected Structures. When technically and economically feasible, the contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:

1. At Residential Structures.

- a. *Mobile Equipment.* Maximum noise levels for non-scheduled, intermittent, and short-term operation (less than 10 days) of mobile equipment

<b>Time of Operation</b>	<b>Single-family Residential (dBA)</b>	<b>Multi-family Residential (dBA)</b>	<b>Semi-residential/ Commercial (dBA)</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays.	60	65	70

- b. *Stationary Equipment.* Maximum noise level for repetitively scheduled and relatively long-term operation (period of 10 days or more) of stationary equipment



**4.11 Noise**

<b>Time of Operation</b>	<b>Single-family Residential (dBA)</b>	<b>Multi-family Residential (dBA)</b>	<b>Semi-residential/ Commercial (dBA)</b>
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays.	50	55	60

**4.11.3 SIGNIFICANCE CRITERIA**

According to the CEQA significance criteria, the Proposed Project would result in a significant impact if it would:

- Expose persons to or cause generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Expose persons to or cause generation of excessive ground-borne vibration or ground-borne noise levels
- Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project Area to excessive noise levels
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project Area to excessive noise levels

**4.11.4 IMPACT ANALYSIS****4.11.4.1 CONSTRUCTION IMPACTS**

**Would the project expose persons to or cause generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Construction of the Proposed Project would not cause noise ordinance standards to be exceeded. A substation is not a noise-sensitive land use for siting purposes. Any possible noise constraint for the Project would thus derive from site-generated noise affecting the closest residences as no other potentially sensitive receptor sites, such as public parks, schools, or hospitals are located nearby. The Construction time limits and the performance

standards in the Lake Elsinore Municipal Code are designed to maintain noise impacts at acceptable levels. The allowable average hourly daytime noise exposure at the nearest single-family residence is 75 dB. The reference noise level for one or two pieces of heavy equipment operating during any hour is 85 dB at 50 feet with variable duty cycles and equipment mobility. A sufficient set-back to achieve -10 dB of geometrical spreading losses is needed to maintain a less-than-significant impact. If construction were to occur at night, or on Sundays or holidays, the standard would be reduced to 60 dB. A reduction of 25 dB is needed to achieve this level.

The needed distance separation to maintain a less-than-significant noise impact during construction is as follows:

7 a.m. to 8 p.m. (Monday-Saturday) -	160 feet
Nights, Sundays -	890 feet

Heavy equipment operations will not occur within 160 feet of the closest homes. However, they will occur within 890 feet. Restriction of equipment operations to 7 a.m. - 8 p.m. on weekdays will maintain construction noise impact within acceptable levels. As a result, construction related impacts exceeding ordinance standards would be less than significant.

**Would the project expose persons to or cause generation of excessive ground-borne vibration or ground-borne noise levels?**

Construction of the Proposed Project would not create excessive vibration. Construction activities related to the Fogarty Substation would cause very minor vibration and would not be noticeable beyond the substation boundaries. There would be no impact on excessive vibration.

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

Construction of the Proposed Project is only temporary and would not create a substantial permanent noise increase. Therefore, construction of the Proposed Project would have no impact on substantial permanent noise.

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

The Proposed Project would not create a substantial temporary noise increase. Temporary construction noise impacts vary markedly because the noise strength of construction equipment ranges widely as a function of the equipment used and its activity level. Short-term construction noise impacts tend to occur in discrete phases dominated initially by earth-moving sources, then by foundation construction, and finally for finish construction.

**Figure 4.11-2, Typical Construction Equipment Noise Generation Levels** shows the typical range of construction activity noise generation as a function of equipment used in various building phases. The earth-moving sources are seen to be the noisiest with equipment noise ranging up to about 90 dB(A) at 50 feet from the source. Two pieces of heavy equipment operating in close proximity to each other may create a combined noise level of around 93 dB. Spherically radiating point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance, or about 20 dB in 500 feet of propagation. The loudest earth moving noise sources will therefore sometimes be detectable above the local background well beyond 1,000 feet from the construction area. Project implementation of applicant proposed measures NOISE-SCE-1 to 4 would restrict construction hours, routes, and idling times, and provide for noise reduction features for equipment. Impacts associated with temporary noise would be less than significant.

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

The Proposed Project is not located within an airport land use plan or, where such a plan has been adopted. Furthermore, the Proposed Project is not located within two (2) miles of a public airport or public use airport. The nearest airport is the Skylark Field Airport, a private airport, which provides glider and skydiving opportunities for the community. The runway surface of Skylark Field Airport consists of gravel and sand. As such, this surface generally does not permit optimal conditions for frequent and convenient airport operations. Because it is located approximately 6 miles from the Proposed Project there is no impact.

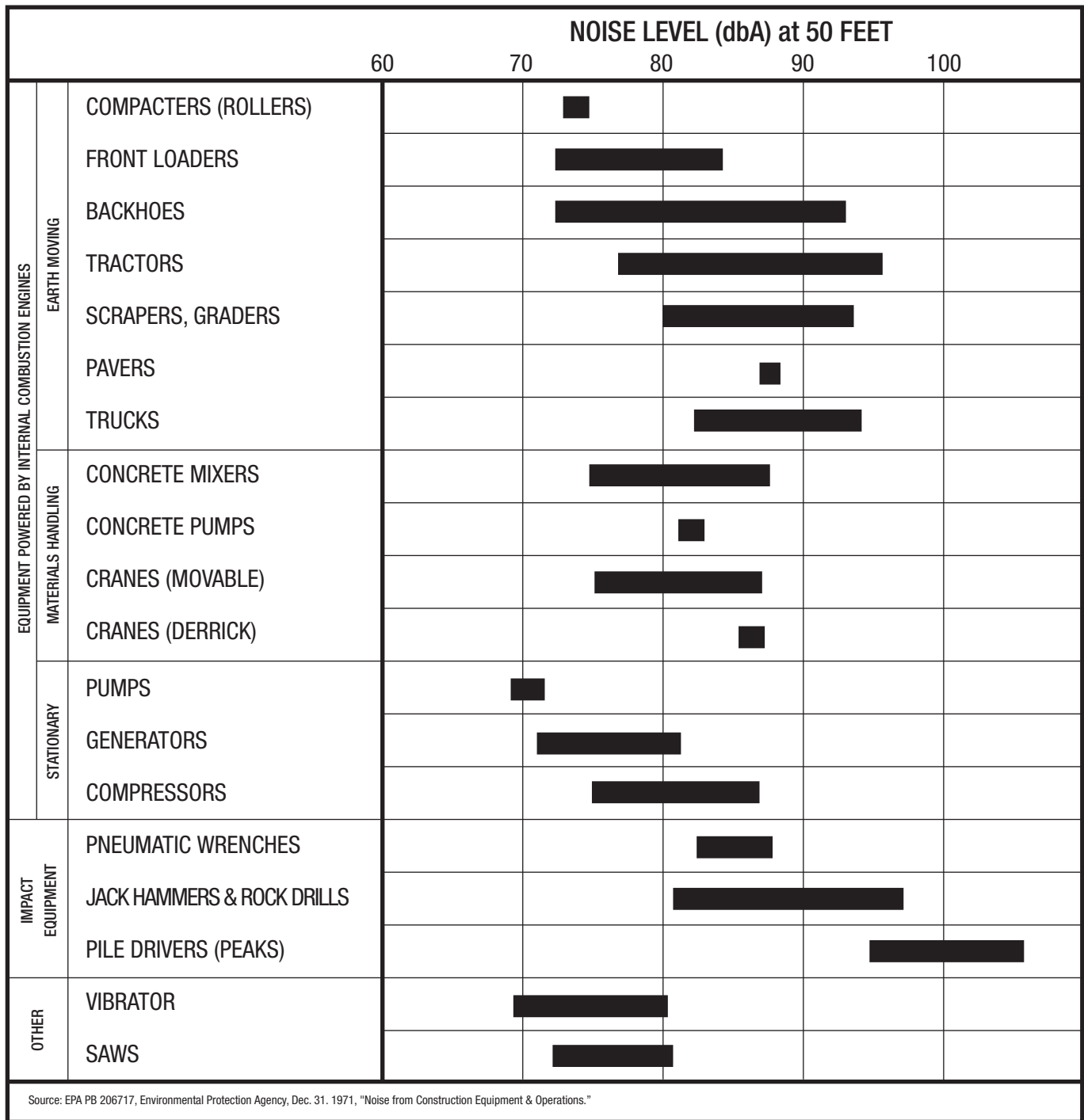
**For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Project Area to excessive noise levels?**

The Proposed Project is not located within the vicinity of a private airstrip. The nearest airport is the Skylark Field Airport, a private airport, which provides glider and skydiving opportunities for the community. Because it is located approximately 6 miles from the Proposed Project there is no impact.

#### **Applicant Proposed Measures**

**NOISE-SCE-1:** All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 7:00 a.m. to 7:00 p.m. and prohibited on Sundays and all legally proclaimed holidays.

**NOISE-SCE-2:** Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.



Revision date: February 14, 2007

## Typical Construction Equipment Noise Generation Levels

FIGURE 4.11-2

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**NOISE-SCE-3:** Construction traffic shall be routed away from residences and schools, where feasible.

**NOISE-SCE-4:** Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A “common sense” approach to vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.)

### **Mitigation Measures**

Because construction of the Proposed Project would result in less than significant impacts to noise, no mitigation measures are required.

#### **4.11.4.2 OPERATION IMPACTS**

**Would the project expose persons to or cause generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Operation of the Proposed Project would not cause noise ordinance standards to be exceeded. Noise from site operations will derive almost exclusively from hum from the transformers and cooling fans. Project-related traffic will be negligible except for occasional preventive maintenance. Transformer noise is the only source considered for impact analysis. Operation of the Proposed Project would result in no impacts to noise ordinance standards.

**Would the project expose persons to or cause generation of excessive ground-borne vibration or ground-borne noise levels?**

Operation of the Proposed Project would not create excessive vibration. Substations do not generate perceptible vibration because the equipment is protected to not damage itself from vibration. Therefore, operation of the Proposed Project would not create any impacts related to excessive vibration.

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

Operation of the Proposed Project would not create a substantial permanent noise increase. The transformer “hum” and fan noise is semi-continuous (more than 30 minutes), and the station will operate at night. Therefore, the most stringent noise standard of 40 dB thus applies to the Proposed Project. The reference noise level from two 28 MVA (115/12 kv) transformers is 66 dBA or less at 3 feet from the equipment, or approximately 10 feet from the



##### 4.11 Noise

transformer core. Noise decays at 6 dB per doubling of distance. The calculated distance to the 40 dB City nocturnal noise standard under clear line of sight conditions is 200 feet. The transformers will be located more than 200 feet from any residence.

The 8 foot high masonry block wall surrounding the transformer and switching equipment will additionally attenuate noise. The noise reduction effectiveness of the wall is at least -10 dB. With the planned perimeter wall, the noise impact zone is reduced to 63 feet from the center of equipment noise generation. There are no noise-sensitive uses within the project noise impact envelope.

The equipment source strengths, the planned 8 foot high block wall barriers, and the 20 foot by 34 foot set-backs from adjacent street ROWs when coupled with the 80 foot and 90 foot ROW widths of the adjacent streets and subsequent set back distances of the two existing residences nearest the project site combine to create conditions that are more than adequate to maintain a less than significant operational noise impact.

##### **Would the project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Operation of the Proposed Project would not create a substantial temporary noise increase. Routine SCE Maintenance would generate negligible temporary noise during operation of the Proposed Project. Impacts to temporary noise associated with the operation of the Proposed Project are considered less than significant.

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

The Proposed Project is not located within an airport land use plan or, where such a plan has been adopted. Furthermore, the Proposed Project is not located within two (2) miles of a public airport or public use airport. The nearest airport is the Skylark Airport, a private airport, which provides glider and skydiving opportunities for the community. Because it is located approximately 6 miles from the Proposed Project there is no impact.

##### **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Project Area to excessive noise levels?**

The Proposed Project is not located within the vicinity of a private airstrip. The nearest airport is the Skylark Field Airport, a private airport, which provides glider and skydiving opportunities for the community. Because it is located approximately 6 miles from the Proposed Project there is no impact.

##### **Applicant Proposed Measures**

Because operation of the Proposed Project would result in less than significant impacts to noise, no applicant proposed measures are provided.

## Mitigation Measures

Because operation of the Proposed Project would result in less than significant impacts to noise, no mitigation measures are required.

### 4.11.5 ALTERNATIVES

#### **Alternative Project Site B**

Construction and operation noise conditions associated with Alternative B would essentially be the same as those experienced with the Proposed Project Site. As Alternative B would be located on the opposite (western) side of Terra Cotta Road, the center of the walled substation equipment envelope would be located approximately 440 feet to the west. Consequently, the two single-family residences located closest to the Proposed Project Site would be farther removed from the Alternative B location. Implementation of Alternative B would not result in significant noise impacts.

#### **Alternative Project Site C**

Construction and operation noise conditions associated with Alternative C are similar to Alternative B and the Proposed Project Site. Alternative C has frontage on Pierce Street, and is located on the southeast side of Nichols Road approximately 1,750 feet east of the Proposed Fogarty Substation Site. A single-family residence is located within 200 feet of the northwest property line of site Alternative C. Construction related noise impacts are less than significant given a 160-foot buffer from this residence. However, if construction within this buffer is unavoidable, than the use of a temporary sound wall would minimize noise related impacts to less than significant.

### 4.11.6 REFERENCES AND COMMUNICATIONS

- Bolt, Beranek and Newman. 1971. "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency. 1971.
- City of Lake Elsinore, General Plan/Noise Element ,1990.
- City of Lake Elsinore, General Plan Update, January 2006.
- City of Lake Elsinore Municipal Code, Chapter 17.78, Section 17.78.080 (F) and (F) (2)
- Industrial Acoustics Company. 1989. *Noise Control Reference Handbook*.
- SCE, Riverway Substation Project, Proponent's Environmental Assessment, June 2006.
- State of California, State Building Standards Commission, Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28)
- United States Environmental Protection Agency (USEPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Office of Noise Abatement and Control, Pub. 550/9-74-004.

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## 4.12 Population and Housing

### 4.12.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The City of Lake Elsinore and the rural unincorporated areas of Riverside County near the Proposed Project are growing and are projected to continue growing both in population and housing. The Southern California Association of Governments (SCAG) evaluates and makes projections of population and housing growth based on US Census data.

#### *Population*

The base population of the six neighboring counties that comprise the Southern California region: Orange, Riverside, Ventura, Los Angeles, San Bernardino, and Imperial was reported to be 14,418,832 in 1990, increased by 1,875,174 to reach 16,516,006 by the year 2000. The increase in population for the region was 13% over the decade. By comparison, the population of Riverside County grew by 32% during the same period, from 1,170,413 in 1990 to 1,545,387 in 2000, outpacing the rate of growth of the Southern California region ((U.S. Decennial Census/Southern California Association of Governments (SCAG)).

Among the cities experiencing growth in Riverside County, the City of Lake Elsinore posted an increase in population of 58.21% between 1900 and 2000 (SCAG, U.S., Decennial Census). In the five years following 2000 the City of Lake Elsinore's population grew by an additional 31%, from 28,928 in 2000 to 38,045 in 2005 (See **Table 4.12-1, Population Trends in Riverside County and the City of Lake Elsinore from 1990-2000** and **Table 4.12-2, Population Growth in the City of Lake Elsinore 2000-2005**).

**Table 4.12-1: Population Trends in Riverside County and the City of Lake Elsinore 1990-2000**

Jurisdiction	Population by Year		Population Increase	
	1990	2000	Number	Percent
<b>City of Lake Elsinore</b>	<b>18,285</b>	<b>28,928</b>	<b>10,643</b>	<b>58.2%</b>
<b>County of Riverside</b>	<b>1,170,413</b>	<b>1,545,387</b>	<b>374,974</b>	<b>32.0%</b>
<i>Sources: City of Lake Elsinore General Housing Element, 2002, 1990/2000-US Decennial Census, 2005-CA-Department of Finance, E-5 Report, 1/1/2005.</i>				

**Table 4.12-2: Population Growth in the City of Lake Elsinore and Riverside County 2000-2005**

Jurisdiction	Population by Year		Population Increase	
	2000	2005	Number	Percent
<b>City of Lake Elsinore</b>	<b>28,928</b>	<b>38,045</b>	<b>9,117</b>	<b>31.5%</b>
<b>County of Riverside</b>	<b>1,545,387</b>	<b>1,877,000</b>	<b>331,613</b>	<b>21.5%</b>
<i>Sources: City of Lake Elsinore General Housing Element, 2002, 1990/2000-US Decennial Census, 2005-CA-Department of Finance, E-5 Report, 1/1/2005.</i>				

**4.12 Population and Housing**

Based upon the reported increases in the size of the population of the City of Lake Elsinore, the City's annual rate (arithmetic rate) of population growth has averaged approximately 5.82% per year between 1990 and 2000 and 6.3% from 2000 to 2005.

***Housing***

The 2000 US Census indicated that Riverside County had 506,218 households, which is a 25% increase from 1990. The increase is higher within the incorporated areas of the County, with 45% and 43% increases in Lake Elsinore and Perris, respectively. Over 91% of the housing units are occupied in the cities. Over 86% of housing units are occupied in the county as a whole. A summary of the measured and projected numbers of households between 1990 and 2020 is listed below (see **Table 4.12-3, Project Region Households and Projections**).

Recently approved developments such as the Lakeside Palms and the Alberhill Ranch residential projects will continue to increase the demand for utility services in the area. The Murdock Alberhill project covers approximately 511.4 acres situated immediately north and west of the Fogarty Substation Project site. The Murdock Alberhill residential project would add a projected 1,449 residential units under its single-family option and 1,819 residential units if the multi-family parcels of the project are included in the overall residential development. The 151.78 acre Lakeside Palms project abuts the southeast corner of the SCE property that contains the Fogarty Substation. The Lakeside Palms project consists of 368 single-family units.

<b>Table 4.12-3: Project Region Households and Projections</b>				
	<b>1990 Census</b>	<b>2000 Census</b>	<b>2010 Projection</b>	<b>2020 Projection</b>
Lake Elsinore	6,066	8,817	12,703	17,386
Perris	6,726	9,652	16,605	20,499
Riverside County	402,067	506,218	685,775	907,932
<b>Source:</b> US CENSUS BUREAU 2006 AND SCAG 2006.				

**4.12.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS****Federal**

There are no Federal regulations applicable to the Proposed Project.

**State**

There are no State regulations applicable to the Proposed Project.

### **Regional and Local**

The legal basis and requirements of the City of Lake Elsinore pertaining to issues related to population and housing are set forth in the Government Code Section 65302 (a) governing the establishment of General Plan Land Use and Housing Elements. Government Code Section 65302 (a) designates “the proposed general distribution and general location and extent of the uses of land for housing...and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan.” Land uses in selected areas of the City of Lake Elsinore are also governed by approved Specific Plans.

#### **4.12.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to population and housing come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Induce substantial population growth in the area, either directly (by proposing new homes and businesses) or indirectly (through the extension of new roads or other infrastructure)
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

#### **4.12.4 IMPACT ANALYSIS**

##### **4.12.4.1 Construction Impacts**

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

Construction of the Proposed Project would not induce substantial population growth in the area, either directly (by proposing new homes and businesses) or indirectly (through the extension of new roads or other infrastructure). Construction impacts of the Fogarty Substation are considered short-term and temporary. Construction would be performed by either SCE construction crews or by local contractors. Contract construction workers would come from either Riverside County or surrounding communities and it is unlikely that they would require housing. If SCE construction crews are used they would likely be based at SCE’s Alhambra facility, and they would require temporary, short-term housing. Therefore, construction of the Proposed Project would result in no impact to population growth.

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

Construction of the Proposed Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. The Proposed Project would not require a large temporary workforce that would create a demand for existing



### 4.12 *Population and Housing*

housing that would generate a need for the relocation or construction of replacement housing elsewhere. Therefore, construction of the Proposed Project would result in no impact to existing housing.

#### **Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

Construction of the Proposed Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. As stated above, the Proposed Project would not require a workforce that would displace substantial numbers of people nor would the Proposed Project necessitate the construction of replacement housing elsewhere. Therefore, construction of the Proposed Project would result in no impact to existing population.

#### **Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

Construction of the Fogarty Substation Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The Proposed Project would not require a workforce large enough to displace a substantial number of people. The Proposed Project would not necessitate the construction of replacement housing elsewhere. Therefore, construction of the Proposed Project would result in no impact to existing population.

#### **Applicant Proposed Measures**

Because construction of the Proposed Project would result in no impact to population and housing, no applicant proposed measures are provided.

#### **Mitigation Measures**

Because construction of the Proposed Project would result in no impact to population and housing, no mitigation measures are required.

#### **4.12.4.2 Operation Impacts**

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

Operation of the Proposed Project would not induce substantial population growth in the area, either directly (by proposing new homes and businesses) or indirectly (through the extension of new roads or other infrastructure). The Fogarty Substation Project would not generate a demand for housing. Creating and extending electrical infrastructure to meet the demand for electricity is a result of, not a precursor to, development in the region. Therefore, operation of the Proposed Project would result in no impact to population growth.

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

Operation of the Proposed Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. The substation would be unmanned and the electrical equipment within the substation would be remotely monitored and controlled by a power management system from the Valley Substation. As the Fogarty Substation would be operated and monitored remotely, SCE personnel would generally visit the site for electrical switching and routine maintenance. Routine maintenance would include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for service continuity and preventive maintenance. SCE personnel would generally visit the substation two to three times per week. Operation of the Proposed Project would not generate a large operations-related workforce from out of the area that would require permanent housing. Therefore, operation of the Proposed Project would result in no impact to existing housing.

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

Operation of the Fogarty Substation Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The Proposed Project would not require a workforce large enough to displace a substantial number of people. The Proposed Project would not necessitate the construction of replacement housing elsewhere. Therefore, operation of the Proposed Project would result in no impact to existing population.

**Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impact to population and housing, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation of the Proposed Project would result in no impact to population and housing, no mitigation measures are required.

**4.12.5 ALTERNATIVES****Alternative Project Site B**

The labor needed to construct Alternative B, at a location directly across Terra Cotta Road from the Fogarty Substation site, would also not require a large temporary workforce that could create a demand for existing housing, thereby displacing local seekers of housing or necessitate the relocation or construction of replacement housing elsewhere. The impacts to population and housing resulting from Alternative B would not be different than the impacts associated with the Proposed Project. Therefore, no impacts to population and housing would result from Alternative B.

#### **Alternative Project Site C**

The impacts to population and housing resulting from Alternative C would not be different than the impacts associated with the Proposed Project. Alternative C is located 1,750 feet east of the Proposed Project site. The northwesterly side of the site fronts on Pierce Street. Labor associated with the construction of Alternative C would also not require a large temporary workforce that could create a demand for existing housing, thereby displacing local seekers of housing or necessitate the relocation or construction of replacement housing elsewhere. Therefore, no impacts to population and housing would result from Alternative C.

#### **4.12.6 REFERENCES AND COMMUNICATIONS**

U.S. Census Bureau, State & County Quick Facts, [www.factfinder.census.gov](http://www.factfinder.census.gov), accessed on 8/11/06.

City of Lake Elsinore General Plan Update, Population and Housing Background Report, January 2006.

HDR, Lakeside Palms TT#32786, Initial Study/Mitigated Negative Declaration, June 2005.

Planning Associates, et.al., Murdock Alberhill Ranch Specific Plan (Specific Plan Amendment), January 1992.

## 4.13 Public Services

### 4.13.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Fire Protection**

The California Department of Forestry and Fire Protection (CDF) provides fire protection services to the Project Area, including unincorporated Riverside County, through administration of the Riverside County Fire Department (RCOFD). The RCOFD consists of 94 stations in 26 battalions. In 2005 the RCOFD responded to 110,224 incidents<sup>1</sup>. As shown in **Figure 4.13-1, Public Services Map**, the nearest fire station (Station No. 10) is located on W. Graham Avenue, four miles, from the substation site. Three additional fire stations, including the McVicker Park Fire Station, Lakeland Village Fire Department and Alternative Fire Protection, are located within five miles of the Proposed Project.

#### **Police Protection**

The Riverside County Sheriff's Department provides police protection services in the City of Lake Elsinore. The Lake Elsinore Police Department/Sheriff's Station is located at 333 Limited Street, four miles from the substation site (Figure 4.13-1). The City averages one (1) sworn officer per 1,000 population for a total of 38 sworn officers (City of Lake Elsinore General Plan Update, Jan 2006).

#### **Schools**

The Lake Elsinore Unified School District (LEUSD) serves all the City of Lake Elsinore, as well as other parts of Riverside County. The LEUSD covers a 140 square mile area with a population of approximately 70,000. The District currently operates 22 schools and programs:

- 13 elementary
- 4 middle
- 2 comprehensive high schools
- 1 continuation school
- 1 alternative education center
- 1 adult education program

As listed in **Table 4.13-1, Schools in the Project Region**, several schools in the City of Lake Elsinore are located within a 2-mile radius of the Project Area (Figure 4.13-1). These schools include Terra Cotta Middle School, Temescal Canyon High School, and Rice Canyon Elementary.

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<sup>1</sup> Riverside County Fire Department: [www.rvcfire.org:80/opencms/facilities/FireStations/index.html](http://www.rvcfire.org:80/opencms/facilities/FireStations/index.html); [www.rvcfire.org:80/opencms/about\\_us/OrgChart/battalions.html](http://www.rvcfire.org:80/opencms/about_us/OrgChart/battalions.html); [www.rvcfire.org:80/opencms/about\\_us/](http://www.rvcfire.org:80/opencms/about_us/); internet sites accessed. Retrieved July 25, 2006.

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**Legend**

Project Site

Schools

Fire Stations

Police Stations

1. Terra Cotta Middle School

2. Machado Elementary School

3. Rice Canyon Elementary

4. Temescal Canyon High School

5. Withrow Middle School

6. Ortega High School

7. Elsinore Middle School

8. Elsinore Elementary School

9. Lake Christian School

1. Fire Station #85

2. Fire Station #10

3. Future Fire Station

1. Lake Elsinore Police Department / Sheriff's Station

Source: City of Lake Elsinore General Plan Background Report, 2006

Revision date: March 1, 2007

FOGARTY SUBSTATION – PROPOSER’S ENVIRONMENTAL ASSESSMENT

Public Services Map

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MILES

FIGURE

4.13-1

Proponent’s Environmental Assessment  
Fogarty 115 kV Substation Project

4.13 - 3



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**Table 4.13-1: Schools in the Project Region**

School	Street Address	Distance from Proposed Project Site (mi.)
Terra Cotta Middle School	29291 Lake Street	1.03
Machado Elementary School	15150 Joy Street	1.44
Rice Canyon Elementary	29535 Westwind Drive	1.54
Temescal Canyon High School	28755 El Toro Road	1.61
Withrow Middle School	30100 Audelo Street	1.79
Ortega High School	528 Chaney Street	2.64
Elsinore Middle School	1203 Graham Ave.	2.98
Elsinore Elementary School	512 W Sumner Ave.	3.28
Lake Christian School	31620 Auto Center Dr.	5.14
Source: Lake Elsinore Unified School District, <a href="http://www2.leusd.k12.ca.us">www2.leusd.k12.ca.us</a> .		

### **Other Services**

#### ***Library***

The Riverside County Library System provides library services to the City of Lake Elsinore. The two libraries nearest to the project are the Lake Elsinore Library (located on W. Graham Avenue), and Lakeside Library (located on Riverside Drive).

#### ***Healthcare Facilities***

The closest hospital facility to Lake Elsinore is the Inland Valley Regional Hospital in Murrieta. The hospital serves southwest Riverside County as the region's only trauma center, providing emergency medical services, trauma surgery, intensive care, diagnostic imaging, and rehabilitation.

#### ***Parks and Recreation***

The Proposed Project's impacts to Park and Recreation facilities are analyzed in Section 4.14.

### **4.13.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

#### **Federal**

There are no Federal public services regulations applicable to the Proposed Project.

#### **State**

##### ***California Fire Code, Section 902.2.2.1***

California Fire Code, Section 902.2.2.1 requires fire apparatus access roads to have a minimum unobstructed width of 20 feet. Other local regulations are related to health, fire, and building safety. These other regulations include the California Health Code, the California Fire Code, and

### 4.13 Public Services

the Uniform Building Code (UBC), which are implemented at the local level by ordinances adopted by Riverside County.

#### **Regional and Local**

The Proposed Project lies within the City of Lake Elsinore. Both City and County jurisdictions manage public services in these areas. The City of Lake Elsinore has not yet completed their General Plan; therefore, none of the local safety policies are applicable (City of Lake Elsinore 2006).

#### **4.13.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to public services come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

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

#### **4.13.4 IMPACT ANALYSIS**

##### **4.13.4.1 Construction Impacts**

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

Construction of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities. An area's population largely affects the need for public services. As a population grows, the need for services such as fire and police protection, schools, and libraries increases. Construction crews would likely come from either SCE's base in Alhambra or contracted from within Riverside County or adjacent areas. Therefore, construction of the Proposed Project would have no impact on public services.

#### **Applicant Proposed Measures**

Because construction of the Proposed Project would result in no impact to public services, no applicant proposed measures are provided.

**Mitigation Measures**

Because construction of the Proposed Project would result in no impact to public services, no mitigation measures are required.

**4.13.4.2 Operation Impacts**

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

Operation of the Fogarty Substation Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities. The Proposed Project is unmanned and would not increase the residential population in the area. Operation of the Proposed Project would not require expansion of fire and police protection, schools, or other public facilities. Furthermore, operation of the Fogarty Substation Project would not significantly affect police and fire protection response times or create higher demand for these public services. Therefore, operation of the Proposed Project would have no impact to public services.

**Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impact to public services, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation of the Proposed Project would result in no impact to public services, no mitigation measures are required.

**4.13.5 ALTERNATIVES****Alternative Project Site B**

Alternative B impacts would be the same as the Proposed Project. Thus, Alternative B would have no impact to public services.

**Alternative Project Site C**

Alternative C impacts would be the same as the Proposed Project. Thus, Alternative C would have no impact to public services.

#### 4.13.6 REFERENCES AND COMMUNICATIONS

- City of Lake Elsinore. 2006. Lake Elsinore School Districts. [Online] Retrieved from: <http://www2.leusd.k12.ca.us/> [cited July 25, 2006]
- Nearby Police/Fire Departments. Mapquest. [Online] Retrieved from: <http://www.mapquest.com> [cited July 25, 2006]
- City of Lake Elsinore General Plan. (1990). City of Lake Elsinore. [Online] Retrieved from: <http://www.lake-elsinore.org/gp/docs.asp>. [cited July 27, 2006]
- Riverside County Fire Department. [Online] Retrieved from: [www.rvcfire.org:80/opencms/facilities/FireStations/index.html](http://www.rvcfire.org:80/opencms/facilities/FireStations/index.html); [www.rvcfire.org:80/opencms/about\\_us/OrgChart/battalions.html](http://www.rvcfire.org:80/opencms/about_us/OrgChart/battalions.html); [www.rvcfire.org:80/opencms/about\\_us](http://www.rvcfire.org:80/opencms/about_us).

## 4.14 Recreation

### 4.14.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The City of Lake Elsinore has approximately 142 acres of city parklands in their General Plan (2006), with an additional 330 acres planned. The City of Lake Elsinore has 11 public parks and administers several recreation sport leagues for both children and adults. The dominant parkland is the Lake Elsinore State Recreation Area. Lake Elsinore is in the City of Lake Elsinore, but the 3,000-acre recreation area is under ownership of the State of California Department of Parks and Recreation. The park includes camping areas, fishing areas and a boat launch. The locations of parks and other recreational resources within the Project Region are shown in **Figure 4.14-1, Public Recreation Facilities**.

The Cleveland National Forest (CNF) located in the Elsinore Mountains and Santa Ana Mountains abuts the western and southwestern boundaries of the City of Lake Elsinore. Campgrounds, picnic grounds, group camps and hiking trails within the CNF are accessible from SR 74 (Ortega Highway) and from numerous trailhead locations along the western fringes of the City of Lake Elsinore.

### 4.14.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

#### **Federal**

There are no Federal regulations applicable to the Proposed Project.

#### **State**

There are no State regulations applicable to the Proposed Project.

#### **Regional and Local**

The City of Lake Elsinore General Plan, Land Use, Parks, and Recreation Element (City of Lake Elsinore General Plan Update, January 2006) designates the “proposed general distribution and general location and extent of the uses of land,” including uses devoted to public recreation and enjoyment of scenic beauty ((per Government Code Section 65302 (a)). Approximately 267.11 acres of the City’s existing land use is devoted to Open Space/Recreation.

### 4.14.3 SIGNIFICANCE CRITERIA

The significance criteria for assessing the impacts to recreational resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment



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#### 4.14.4 IMPACT ANALYSIS

##### 4.14.4.1 Construction Impacts

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

Construction of the Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Increased demand for local recreational facilities is primarily generated by increases in residential population. The Proposed Project does not involve the construction of new residential units, nor would it result in an increase in residential population. Construction activities associated with the Proposed Project would not result in the increased use of city parks or other recreational facilities, or cause the deterioration of these facilities. Construction of the Proposed Project would have no impact on parks or recreational facilities.

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

Construction of the Proposed Project would not include or require the construction or expansion of recreational facilities. Therefore, no impact to recreational resources would occur.

##### Applicant Proposed Measures

Because construction of the Proposed Project would result in no impact to recreation, no applicant proposed measures are provided.

##### Mitigation Measures

Because construction of the Proposed Project would result in no impact to recreation, no mitigation measures are required.

##### 4.14.4.2 Operation Impacts

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

Operation of the Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Increased demand for local recreational facilities is primarily generated by increases in residential population. The Proposed Project is an unmanned facility. The Proposed Project does not involve the construction of new residential units, nor would it result in an increase in residential population. Operation of the Proposed

##### 4.14 Recreation

Project would not result in the increased use of city parks or other recreational facilities, or cause the deterioration of these facilities. Therefore, the operation and maintenance of the Proposed Project would have no impact on parks or recreational facilities.

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

Operation of the Proposed Project would not include or require the construction or expansion of recreational facilities. Therefore, no impact to recreational resources would occur.

**Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impact to recreation, no applicant proposed measures are provided.

**Mitigation Measures**

Because operation of the Proposed Project would result in no impact to recreation, no mitigation measures are required.

#### 4.14.5 ALTERNATIVES

**Alternative Project Site B**

Alternative B would not result in the increased use of city parks or other recreational facilities, or cause the deterioration of these facilities. Furthermore, Alternative B would neither include nor require the construction or expansion of recreational facilities. As Alternative B is identical to the Proposed Project in most all respects except exact location, its impact to recreational resources would be the same as those of the Proposed Project. No impact to recreational resources would result from the implementation of Alternative B.

**Alternative Project Site C**

Alternative C would not result in the increased use of city parks or other recreational facilities, or cause the deterioration of these facilities. Furthermore, Alternative C would not include nor require the construction or expansion of recreational facilities. As Alternative C is identical to the Proposed Project in most all respects except exact location, its impact to recreational resources would be the same as those of the Proposed Project. No impact to recreational resources would result from the implementation of Alternative C.

#### 4.14.6 REFERENCES AND COMMUNICATIONS

City of Lake Elsinore. Land Use and Recreation (Chapter 1), Lake Elsinore General Plan Update, January 2006.

U.S. Department of Agriculture, United States Forest Service. Map of the Cleveland National Forest (Palomar and Descanso Ranger Districts). 1985.

## 4.15 Transportation and Traffic

### 4.15.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Highways and Roadways**

The transportation system in the surrounding Project region is comprised of Interstate highways, state highways, and Riverside County and Lake Elsinore local roads. The region is relatively sparsely populated compared to more urban areas located closer to Los Angeles. The region is linked to Los Angeles and Orange Counties principally by Interstate 10 (I-10 or San Bernardino Freeway), Interstate 15 (I-15), and State Route 74 (Highway 74 or Ortega Highway). Below is a description of the major roadways in the project region. The existing roadway network and intersections for the traffic study area roadways within the Project Region are shown in **Figure 4.15-1, Local Transportation Network**.

#### ***Interstate 15***

I-15 traverses through the City of Lake Elsinore in a generally north-south direction along the east side of Lake Elsinore. To the north, I-15 connects with State Route 91 (SR-91 or Riverside Freeway), State Route 60 (SR-60 or Pomona Freeway), and I-10. I-15 is the main route toward the Inland Empire from the Project Area. To the south, I-15 is the link to San Diego County. I-15 is currently three lanes in each direction within the Project vicinity. The Proposed Project Site is situated approximately one mile southwesterly of the location of the Nichols Road freeway exit.

#### ***State Route 74***

Highway 74 traverses in a generally east/west direction. Highway 74 heads east from the City of Lake Elsinore and connects with I-215, and is the link to Perris and Hemet. Highway 74 has been widened to a four-lane divided roadway through most of the project region (north of I-15 toward Perris) to accommodate recent development along the area (City of Perris 2005).

#### **Existing Public Transit Systems, Rail, and Air Transport**

Fixed-route transit services and demand response (dial-a-ride) transit services are provided by the Riverside Transit Agency (RTA). RTA operates 40 fixed bus routes and demand responsive services within a 2,500-square mile area of western Riverside County. RTA's fixed routes have been designed to establish transportation connections between all cities and unincorporated communities in western Riverside County, including Lake Elsinore (City of Lake Elsinore 2006).

#### ***Park and Ride***

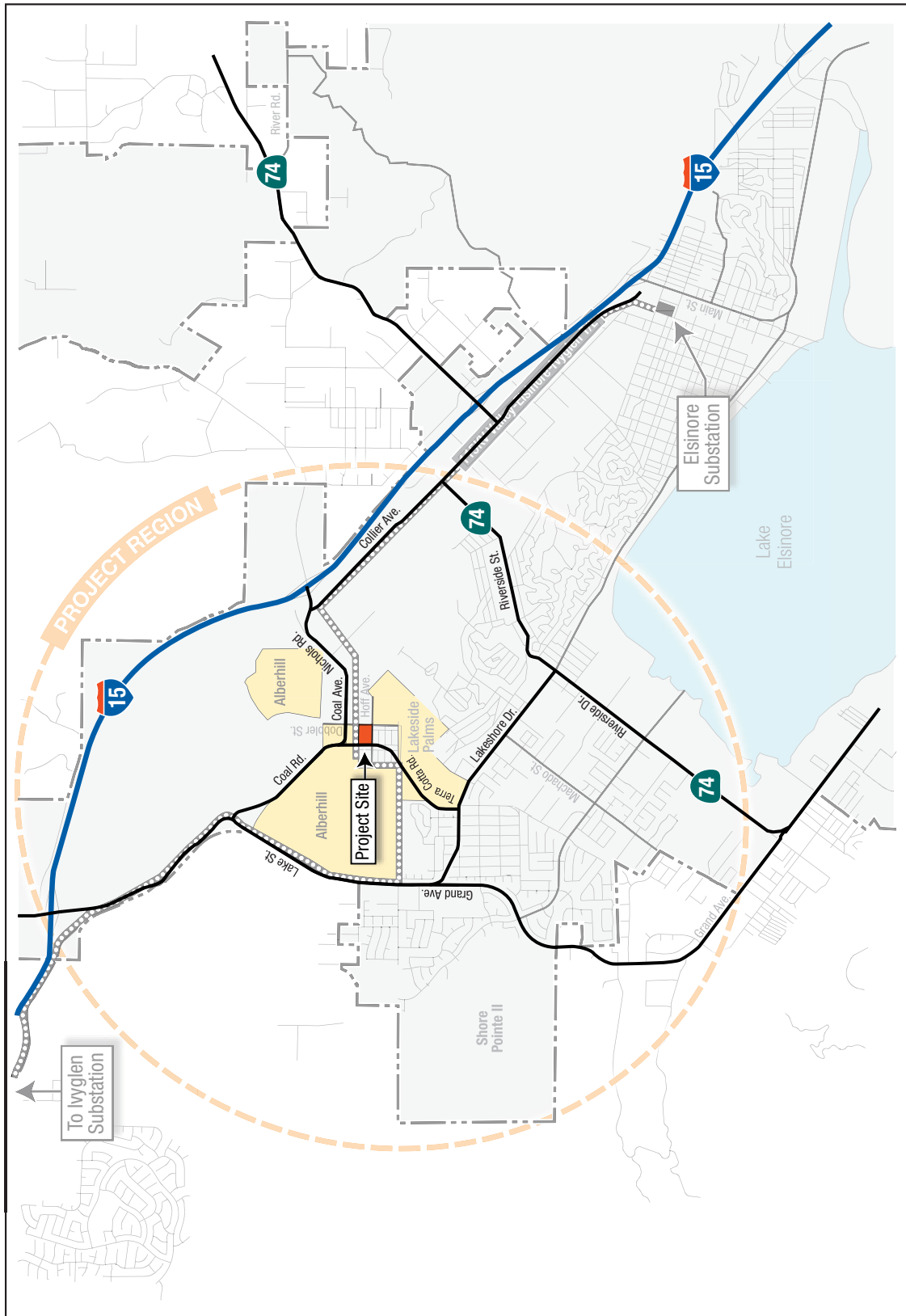
The Riverside County Transportation Commission provides free park and ride sites to encourage residents to carpool or use alternative forms of transportation. Several park and ride lots exist within the region (City of Lake Elsinore 2006).

#### ***Railroads***

There are currently no passenger railroad services within the Project region. The Union Pacific (UP) and the Burlington Northern Santa Fe (BNSF) Railroads provide freight service in

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Riverside County, connecting the County with major markets within California and other destinations north and east.

### ***Air Transportation***

Skylark Field Airport is a private airport located within the City of Lake Elsinore, in the vicinity of the southern edge of Lake Elsinore. This airport provides glider and skydiving opportunities for the community and surrounding region. The runway surface of Skylark Field Airport consists of gravel and sand. As such, this surface generally does not permit optimal conditions for frequent and convenient airport operations (City of Lake Elsinore 2006).

### **Project Area**

Major roadways and arterials in the Project Area are described below.

**Lake Street** is an urban arterial (6 lanes/120 foot ROW) that oriented primarily in a north from its intersection with Lakeshore Drive north to the I-15 interchange at the northern extremity of the City of Lake Elsinore. Lake Street lies approximately 4,000 feet west of the Proposed Project Site and is separated from the site by hill terrain comprising portions of the Murdock Alberhill Ranch.

**Lakeshore Drive** is classified as an urban arterial (6 lanes/ 120 foot ROW) and from its intersection with Lake Street (approximately one mile southeast of the Proposed Project site) it passes southeasterly through the City of Lake Elsinore on the north side of Lake Elsinore.

**Terra Cotta Road** is designated as a secondary roadway with a planned four lanes within a 90 foot wide ROW that extends north from Lakeshore Drive (3,400 feet southwest of the site) to Coal Avenue and Nichols Road (approximately 400 feet north of the site). The portion of Terra Cotta road that abuts the western side of the Proposed Project Site currently consists of a two-lane dirt road. With the buildout of the Murdock Alberhill Ranch the northerly Terra Cotta Road connection to Nichols Road will be improved (up to the Specific Plan boundary) to a Secondary Highway Standard with a 114 foot wide ROW and a 62 foot curb-to-curb pavement width.

**Coal Road** is a restricted access, unpaved ranch road that runs northwest and southeast, across the Murdock Alberhill Ranch, connecting Lake Street to the western terminus of Coal Avenue (a local westerly dirt road extension of Nichols Road). Terra Cotta Road connects at the south side of the intersection between Coal Road and Coal Avenue. With the buildout of the Murdock Alberhill Ranch, Coal Road will be abandoned and re-named as a westerly extension of Nichols Road. The course of Nichols Road across the Murdock Alberhill Ranch to Lake Street will be improved to Major Highway standards with a 116 foot wide ROW.

**Nichols Road** provides the most direct connection northeasterly to Interstate 15 from the Proposed Project Site. Approximately 1,200 feet of Nichols Road is paved southwest of the street's on- and off-ramp connections with Interstate 15. From the paved end of Nichols Road the street continues westerly approximately 4,800 feet as a two-lane dirt road via Nichols Road and Coal Avenue to Terra Cotta Road. With the development of the Murdock Alberhill Ranch,

### 4.15 *Transportation and Traffic*

Nichols Road will be improved to Major Highway standards with a 116 foot wide ROW between the I-15 Freeway and Lake Street.

#### **4.15.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS**

##### **Federal**

There are no Federal regulations regarding transportation and traffic related to the Proposed Project.

##### **State**

###### ***Caltrans***

The California Department of Transportation (Caltrans) is responsible for the oversight of state highways within California.

###### ***Congestion Management Plan***

A Congestion Management Plan (CMP) was enacted by the state legislature in 1989 to improve traffic congestion in California's urbanized areas. Under the program, regional agencies are designated within each county to prepare and administer the CMP. The agency charged with administering the CMP in Riverside County is the County Transportation Commission. The County Transportation Commission adopted the County's CMP in November 1992 (County of Riverside).

##### **Regional and Local**

The County of Riverside (2003a), and the City of Lake Elsinore (1990) General Plans all include a Circulation Element. The Circulation Element is designed to provide a blueprint for construction and maintenance of a transportation network within Riverside County and the respective cities. The road network is based upon development permitted by the Land Use Element in each General Plan, and existing and planned development in the affected areas. The element addresses the County and cities' plans to upgrade streets, arterials, regional bikeways, public transportation, rails service, and air service. The goals, objectives, and policies for circulation are contained in the respective General Plans.

###### ***Riverside County***

The Riverside County General Plan, Circulation Element (Policy C 3.8) requires all construction projects to restrict heavy-duty truck use in residential and community centers and requires the use of established truck routes whenever possible.

###### ***City of Lake Elsinore***

The City of Lake Elsinore is currently updating their General Plan and is expected to have several policies related to transportation that may be applicable to the project (City of Lake Elsinore 2006).

### 4.15.3 SIGNIFICANCE CRITERIA

The significance criteria for assessing the impacts to transportation and traffic come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
- Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

### 4.15.4 IMPACT ANALYSIS

#### 4.15.4.1 Construction Impacts

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

Construction of the Proposed Project would not cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Construction traffic would access the Proposed Project Site via Terra Cotta Road. All construction material and equipment for the Proposed Project, including the transformers and tubular steel poles (TSPs), would be delivered by truck to the site roadway to Terra Cotta Road from either Lakeshore Drive, approximately 4,100 feet to the south, or the I-15 Freeway and Nichols Road approximately 6,600 feet to the northwest. Access via Terra Cotta Road from Lakeshore Drive would traverse approximately 1,800 feet of paved road through single-family residential neighborhoods and approximately 2,300 feet of dirt road through a landscape distinguished by dispersed single-family residences. The northerly route connecting Terra Cotta Road with the Nichols Road interchange on the I-15 Freeway traverses approximately 1,320 feet of a paved portion of Nichols Road adjacent to the I-15 Freeway and 5,280 feet of dirt roads that pass through largely undeveloped and vacant areas containing few single family residences.

The majority of the truck traffic to the site would use major streets and the I-15 Freeway to the Nichols Road freeway exits. Grading activity is in progress for the re-alignment and

## 4.0 ENVIRONMENTAL IMPACT ASSESSMENT

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### 4.15 Transportation and Traffic

improvement of Nichols Road to provide a Major Highway connection between the I-15 Freeway and Lake Street across the Alberhill Ranch. The route will replace the existing dirt road route segments of Nichols Road, Coal Avenue, and Coal Road that now link to provide the most direct access from the Proposed Project Site to the I-15 Freeway (see **Figure 4.15-2, Truck Routes within the Project Area**). Traffic related impacts during construction of the Proposed Project are anticipated to be less than significant. The Proposed Project would also implement applicant proposed measure TRANS-SCE-1 to further reduce impacts.

#### **Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

Construction of the Proposed Project would not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Truck traffic would be scheduled during off-peak traffic hours to the extent feasible. However, some such as cement truck deliveries may need to be made during peak hours when footing work is being performed. The transformers and TSPs would be delivered by heavy transport vehicles and be off-loaded on-site by large cranes with support trucks. Construction of the proposed substation may precede the completion of paving and/or roadway width improvements to Terra Cotta Road and the likely access roads between the end of pavement of Nichols Road west of the on- and off-ramps to the I-15 Freeway. Under this condition, SCE would be required to construct an improved temporary driveway access at the front of the proposed substation within the ROW of Terra Cotta Road.

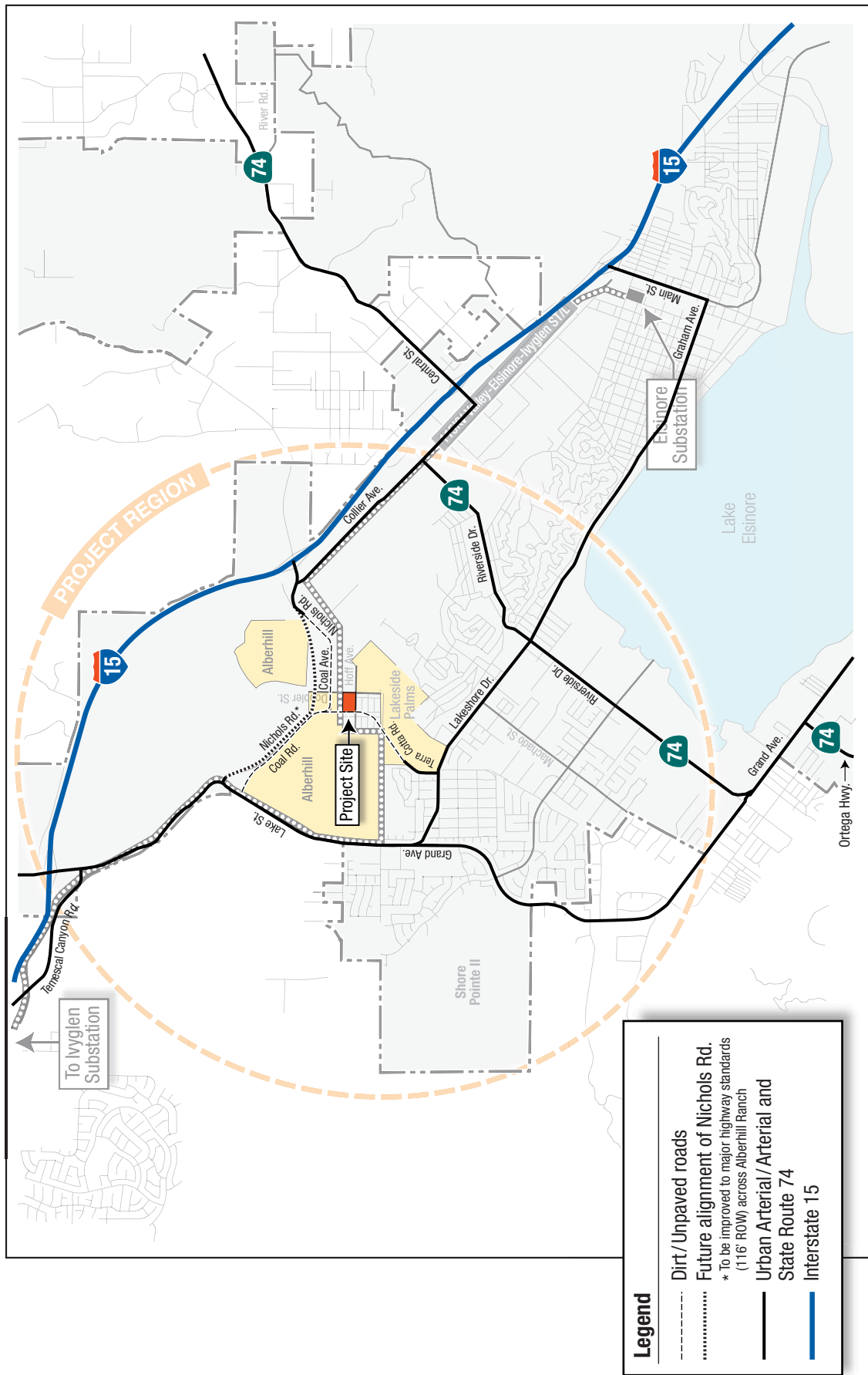
During construction of the two new overhead 115 kV line segments, approximately 200 feet each, and trenching for the telecommunication line, single lane closures are not anticipated. However, in the event that such a closure is necessary, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee, 1996) (see **TRANS-SCE-2**).

An estimated 280 truck trips would be necessary to transport materials to the site. SCE Proposed Measures include the use of off-peak hours when possible and staggering trips throughout the 4-week period of grading. Further, the trucks would use the designated truck routes to access the substation site (see **TRANS-SCE-4**).

Construction of the Proposed Project would result in less than significant impacts to level of service standards.

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

Construction of the Proposed Project would not result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The nearest airport is the Skylark Airport, which provides glider and skydiving opportunities for the community. It is located approximately 6 miles from the Proposed



Source: City of Lake Elsinore General Plan Update, January 2006. Murdock Alberhill Specific Plan, 1988.

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FOGARTY SUBSTATION – PROPOSER'S ENVIRONMENTAL ASSESSMENT

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MILES

FIGURE 4.15-2

Truck Routes within the Project Region



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Project. Construction activities would not result in a change to air traffic patterns and therefore would have no impact to airborne traffic.

**Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?**

Construction of the Proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment). Traffic caused by Proposed Project construction would be temporary, short-term and minimal as traffic on Terra Cotta Road and adjacent streets near the project site is light, and would not result in the increased hazards due to design features, a loss of adequate emergency access, or a diminishment of the City's parking capacity. Construction impacts to traffic hazards would be less than significant.

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

The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including emergency access. All construction activity would occur on the Proposed Project Site and no activities are planned that would affect response by police, fire, ambulance, or paramedic vehicles. Therefore, there would be no impact associated with emergency access. However, in the event that an activity is planned that could affect traffic, (i.e, equipment delivery necessitating lane closures), SCE would consult with local agencies including Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore (see TRANS-SCE-1, -2). Therefore, there would no impact to an adopted emergency response plan or evacuation plan

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

Construction of the Proposed Project would not result in inadequate parking capacity. Project construction would require an estimated maximum of 25 employees. The Proposed Project site and the surrounding vicinity, including the vacant Dryden site, provides adequate parking capacity. In addition, SCE proposes measures to encourage carpooling by construction personnel (see **TRANS-SCE-3** and **TRANS-SCE-5**). Construction of the Proposed Project would result in less than significant impacts to parking capacity.

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

Construction of the Proposed Project would not conflict with adopted policies, plans or programs supporting alternative transportation. In addition, SCE proposes measures to encourage carpooling by construction personnel (see TRANS-SCE-3). The Proposed Project would have less than significant impacts to alternative transportation.

#### Applicant Proposed Measures

**TRANS-SCE-1:** SCE shall consult with Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore, to schedule construction activities that may affect traffic.

**TRANS-SCE-2:** If lane closures are required, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Control Committee 1996). These measures might include the use of cones, flagmen, detours, or performance of construction at night if work requires equipment or personnel operation within the road right-of-way.

**TRANS-SCE-3:** SCE would limit the number of trips required by encouraging carpooling.

**TRANS-SCE-4:** Trucks would use designated truck routes whenever possible.

**TRANS-SCE-5:** SCE would encourage parking in areas that would not have adverse impacts to existing parking availability.

#### Mitigation Measures

As impacts to transportation and traffic would be less than significant during the construction of the Proposed Project, no mitigation measures are necessary.

#### 4.15.4.2 Operation Impacts

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

Operation of the Proposed Project would not cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). The proposed substation would be unmanned and the electrical equipment within the proposed substation would be remotely monitored and controlled by a power management system from Valley Substation. Due to the proposed substation being remotely operated, SCE personnel would generally visit for electrical switching and routine maintenance. These visits are anticipated to occur two to three times per week, and would have a negligible impact on traffic within the Project Area. Thus, operation activities at the Proposed Project would generate less than significant impacts to transportation and traffic in the Project Area.

**Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

Operation of the Proposed Project would not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. As stated above, the proposed substation would be unmanned and remotely monitored. The scheduled maintenance by SCE employees is minimal. Therefore, impacts to level of service standards would be less than significant.

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

The Proposed Project is not located in the vicinity of air or rail transport and as such would not result in any change to air traffic or rail patterns. Therefore, the Proposed Project would have no impacts to airborne or rail traffic.

**Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?**

The Proposed Project does not include design features that would result in road hazards. The Proposed Project is located on vacant land that would be accessed via a single driveway on Terra Cotta Road. Therefore, the Proposed Project would have no impacts to traffic hazards.

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

The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including emergency access. All operation activity would occur on the Proposed Project Site and no activities are planned that would affect response by police, fire, ambulance, or paramedic vehicles. Therefore, there would be no impact associated with emergency access.

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

Operation of the Proposed Project would not result in inadequate parking capacity. The substation would be unmanned and remotely monitored. The scheduled maintenance by SCE employees would be minimal. Adequate parking capacity will be provided on-site. Therefore, there would be no impacts associated with parking.

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

The Proposed Project would not conflict with adopted policies, plans or programs supporting alternative transportation. Therefore, the Proposed Project would have no impacts to alternative transportation.

## 4.0 ENVIRONMENTAL IMPACT ASSESSMENT

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### 4.15 Transportation and Traffic

#### Applicant Proposed Measures

Because operation of the Proposed Project would result in less than significant impacts to traffic and transportation, no applicant proposed measures are provided.

#### Mitigation Measures

Because operation of the Proposed Project would result in less than significant impacts to traffic and transportation, no mitigation measures are required.

### 4.15.5 ALTERNATIVES

#### **Alternative Project Site B**

Alternative Site B would require a similar number of truck trips as the Proposed Project in order to transport materials to the site. As Alternative Site B is located across Terra Cotta Road from the Proposed Project, Alternative Site B would use the same access and haul routes as the Proposed Project. In all respects, impacts to traffic and transportation during construction and operation would be similar to those for the Proposed Project.

#### **Alternative Project Site C**

Alternative Site C is similar to the Proposed Project and Alternative Site B such that it would require a similar number of truck trips in order to transport materials to the site. Alternative Site C is located approximately 1,750 feet east of the Proposed Project. The northwesterly side of the site fronts for nearly 550 feet along Pierce Street. Alternative Site C would use similar access and haul routes as the Proposed Project. Impacts to traffic and transportation associated with the construction and operation would be similar to those for the Proposed Project.

### 4.15.6 REFERENCES AND COMMUNICATIONS

City of Lake Elsinore. January 2006. Chapter 2, Transportation Resources, General Plan Background Report.

California Joint Utility Traffic Control Committee. 1996. *Work Area Protection and Traffic Control Manual*. April 1996.

HDR. June 2005. Lakeside Palms (TT# 32786-Centex Homes) Mitigated Negative Declaration.

Kunzman Associates. 2005. *City of Lake Elsinore Lakeside Palms Traffic Analysis*. May 2005.

Planning Associates, et. al. January 1992. Murdock Alberhill Specific Plan Amendment.

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## 4.16 Utilities

### 4.16.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

#### **Water Supply and Wastewater Treatment**

The Elsinore Valley Municipal Water District (EVMWD), a sub agency of the Western Municipal Water District (WMWD), currently provides water, and wastewater treatment services to the City of Lake Elsinore and environs. The WMWD is a member agency of the Metropolitan Water District of Southern California. EVMWD procures water from a variety of sources including local groundwater, surface water from Railroad Canyon Reservoir, and imported water from the Colorado River Aqueduct and State River Project. To meet rising demand, the EVMWD has plans to develop additional distribution facilities and water sources. Among these are two groundwater wells in the Lake Elsinore Back Basin (Lake Elsinore General Plan, 2006).

EVMWD collects and conveys wastewater generated in the City of Lake Elsinore to three tertiary level treatment facilities. They maintain 310 miles of gravity flow sewer pipes augmented by 31 lift stations. The tertiary treatment facilities perform preliminary treatment, secondary treatment, solids handling and disinfection process. During these processes the wastewater is cleaned, disinfected and converted to recycled water.

#### **Electricity and Natural Gas**

Southern California Edison (SCE) provides electrical services to the City of Lake Elsinore. Southern California Gas Company (SCG) provides natural gas services to the City of Lake Elsinore.

#### **Solid Waste**

CR&R Incorporated and Riverside County Waste Management Department manage the removal and disposal of solid waste in the City of Lake Elsinore. The City of Lake Elsinore Public Works Recycling, and the Household and Hazardous Waste Disposal Department manage recyclable materials and hazardous waste in the City. There are no landfills located in the City of Lake Elsinore, therefore solid waste is taken by CR&R Incorporated to the El Sobrante Landfill south of the City of Corona, and to the Lamb Canyon Landfill between the cities of Beaumont and San Jacinto.

### 4.16.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

#### **Federal**

There are no Federal utility regulations applicable to the Proposed Project.

#### **State**

##### ***California Public Utilities Commission***

The CPUC regulates intrastate and local natural gas and electrical distribution facilities and services, natural gas procurement, water utilities, pipelines, and production and gathering. Regulations related to natural gas services at the local level include the California Building Code, the California Health and Safety Code, the California Fire Code, and their associated implementing ordinances of Riverside County.

##### ***California Department of Water Resources***

The California Department of Water Resources (CDWR) manages California's water resources. The regulations overseen by CDWR regarding water service availability include the Urban Water Management Planning Act and Senate Bills (SB) 221 and 610. The California Act, adopted in 1983, requires all urban water suppliers within the state to prepare an Urban Water Management Plan and update them every five years.

##### ***California Integrated Waste Management Act***

The California Integrated Waste Management Act (Cal. Pub. Res. Code § 40000 et seq.) requires municipalities to divert 25 percent of their solid waste from landfills to recycling facilities by 1995 and 50 percent by 2000.

#### **Regional and Local**

Buildings and other structures and equipment owned and operated by a public utility or private utility company are subject to regulation by the California Public Utilities Commission; these projects are exempt from local regulations.

##### ***City of Lake Elsinore***

The City of Lake Elsinore has no regulations for utilities applicable to the Proposed Project.

### **4.16.3 SIGNIFICANCE CRITERIA**

The significance criteria for assessing the impacts to mineral resources come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects



- Have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- Result in determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Not comply with federal, state, and local statutes and regulations related to solid waste

#### 4.16.4 IMPACT ANALYSIS

##### 4.16.4.1 Construction Impacts

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

Construction of the Proposed Project would not have discharges exceeding wastewater treatment requirements. Wastewater generated on site would be nominal and portable toilets would be utilized during construction. There would be no impacts associated with requirements of the applicable Regional Water Quality Control Board.

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

Construction of the Proposed Project would not require nor result in the construction of new water or wastewater treatment facilities. Wastewater generated on site would be nominal and portable toilets would be utilized during construction. Water usage for the Proposed Project would be limited to dust suppression during construction. Therefore, construction of the Proposed Project would result in no impact.

##### **Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Construction of the Proposed Project would not require new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The Proposed Project's construction would not result in discharges to the local storm drain system. Water usage for the Proposed Project would be limited to dust suppression during construction. Therefore, no impacts associated with storm water drainage facilities would result from the construction of the Proposed Project.

**Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

Construction of the Proposed Project would have sufficient water supplies available to serve the Proposed Project from existing entitlements and resources, therefore new or expanded entitlements are not needed. Water usage for the Proposed Project would be limited to dust suppression during construction. Therefore, construction of the Proposed Project would result in no impacts to water supply.

**Would the project result in determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Construction of the Proposed Project would not result in determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments. Wastewater generated on site would be nominal and portable toilets would be utilized during construction. Construction of the Proposed Project would have no impacts associated with inadequate wastewater treatment capacity.

**Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?**

The Proposed Project would not be served by a landfill with insufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs. The amount of waste transported to a municipal landfill during construction of the Proposed Project would be minimal, and is not expected to impact landfill capacity in the area. Therefore, there are no construction related impacts to landfill capacity.

**Would the project not comply with federal, state, and local statutes and regulations related to solid waste?**

The Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. Construction related municipal waste, as stated above, would be minimal. Therefore, construction of the Proposed Project would result in no impacts to federal, state, or local statutes related to solid waste.

**Applicant Proposed Measures**

Because construction of the Proposed Project would result in no impacts to utilities and service systems, no applicant proposed measures are proposed.

**Mitigation Measures**

Because construction of the Proposed Project would result in no impacts to utilities and service systems, no mitigation measures are required.

#### 4.16.4.2 Operation Impacts

##### **Would the project Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Operation of the Proposed Project would not have discharges exceeding wastewater treatment requirements. Wastewater generated on site would be nominal and no restrooms or other facilities that would generate wastewater would be utilized during operation of the Proposed Project. Therefore, operation of the Proposed Project would have no impacts associated with requirements of the applicable Regional Water Quality Control Board.

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

Operation of the Proposed Project would not require nor result in the construction of new water or wastewater treatment facilities. Water usage at the substation would be limited to irrigation of the surrounding landscaping during project operation. Water for irrigation would require a tie-in from a municipal water source but would not use water in volumes sufficient to require construction of new water facilities. Therefore, operation of the Proposed Project would result in no impact.

##### **Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Operation of the Proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, no impacts associated with storm water drainage facilities from operation of the Proposed Project.

##### **Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

Operation of the Proposed Project would have sufficient water supplies available to serve the project from existing entitlements and resources, therefore new entitlements are not needed. Water usage for the Proposed Project would be limited to irrigation of the surrounding landscaping during project operation. Water for irrigation would require a tie-in from a municipal water source but would not use water in volumes sufficient to require construction of new water facilities. Therefore, operation of the Proposed Project would result in no impacts to water supply.

**Would the project result in determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Operation of the Proposed Project would not result in determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Wastewater generated on site would be nominal and no restrooms or other facilities that generate wastewater would be utilized during the operation of the Proposed Project. Operation of the Proposed Project would have no impacts associated with inadequate wastewater treatment capacity.

**Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?**

The Proposed Project would not be served by a landfill with insufficient permitted capacity to accommodate the operation of the Proposed Project's solid waste disposal needs. The amount of solid waste generated during the operation and maintenance of the Proposed Project would be transported to a municipal landfill. The amount generated would be minimal, and is not expected to impact landfill capacity in the area. Therefore, there are no operation related impacts to landfill capacity.

**Would the project not comply with federal, state, and local statutes and regulations related to solid waste?**

Operation of the Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. Solid waste generated during operation of the Proposed Project, as stated above, would be minimal. Therefore, the operation of the Proposed Project would result in no impacts to federal, state, or local statutes related to solid waste.

#### **Applicant Proposed Measures**

Because operation of the Proposed Project would result in no impacts to utilities and service systems, no applicant proposed measures are proposed.

#### **Mitigation Measures**

Because the Proposed Project would result in no impacts to utilities and service systems, no mitigation measures are required.

#### **4.16.5 ALTERNATIVES**

##### **Alternative Project Site B**

Like the Proposed Project, Alternative B would only require a small amount of water for dust control, and would not require wastewater services, or other utilities for construction. The operation of Alternative B would have similar effects on utilities and service systems as

described for the Proposed Project. Therefore, the impacts to utilities and service systems would be the same as those for the Proposed Project.

### **Alternative Project Site C**

Like the Proposed Project, Alternative C would only require a small amount of water for dust control, and would not require wastewater services, or other utilities for construction. The operation of Alternative C would have similar effects on utilities and service systems as described for the Proposed Project. Therefore, the impacts to utilities and service systems would be the same as those for the Proposed Project.

#### **4.16.6 REFERENCES AND COMMUNICATIONS**

- City of Lake Elsinore. (2006). Public Works Department. [Online] Retrieved from: <http://www.evmwd.com> [July 27, 2006]
- City of Lake Elsinore General Plan. (1990). City of Lake Elsinore. [Online] Retrieved from: <http://www.lake-elsinore.org/gp/docs.asp>. [July 27, 2006]
- Southern California Edison. [Online] Retrieved from [www.sce.com/AboutSCE/CompanyOverview](http://www.sce.com/AboutSCE/CompanyOverview) [August 3, 2006]
- Southern California Gas Company. [Online] Retrieved from [www.socalgas.com/about/profile](http://www.socalgas.com/about/profile) [August 3, 2006]

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# 5: COMPARISON OF ALTERNATIVES

## 5.1 Introduction

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Chapter 5 provides a comparison of the environmental impacts of the alternatives to the Proposed Project. CEQA Guidelines (Section 15126.6 (d)) require that an environmental impact report include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. CEQA does not require a review of alternatives for an Initial Study and Negative Declaration or Mitigated Negative Declaration. However, the CPUC General Order No. 131-D requires that an Application for a Permit to Construct include the “[r]easons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.”

The Project Objectives, defined in Section 1.4, are also described below.

### 5.1.1 PROJECT OBJECTIVES

- Serve projected electrical demand requirements in the Electrical Needs Area beginning in 2009
- Maintain system reliability within the Electrical Needs Area
- Improve operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area
- Utilize SCE owned property for location of the project
- Meet project needs while minimizing environmental impacts
- Meet project needs in a cost-effective manner

These objectives guided SCE in developing a range of reasonable alternatives to the Proposed Project, or to the location of the Proposed Project, which would feasibly attain the Project Objectives. Only one system alternative satisfies the project objectives, while the No Project Alternative does not satisfy any of the objectives. The alternatives differ only in the site location of the substation facility.



## 5.2 Comparison of Alternatives

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### 5.2.1 DESCRIPTION OF IMPACTS OF ALTERNATIVES

The analyses presented in Chapter 4.0 indicate that none of the alternatives have significant impacts or impacts that cannot be mitigated to less than significant levels.

The Proposed Project, Site Alternative B, and Site Alternative C result in either no impacts, less than significant impacts, or potentially significant but mitigable impacts for all resource categories evaluated.

### 5.2.2 ALTERNATIVE IMPACTS SUMMARY TABLE

**Table 5-1 Comparison of Alternatives** provides a comparison of the Proposed Project with each of the alternative sites that were evaluated in the PEA.

### 5.2.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The Proposed Project, Site Alternative B, and Site Alternative C would not result in impacts that cannot be mitigated to less than significant levels. SCE has selected the Proposed Project as the preferred alternative (Proposed Project) because it best satisfies the Project Objectives.

Table 5-1: Comparison of Alternatives			
Section	Proposed Project (PP)	Alternative B	Alternative C
Aesthetics	Less than Significant Impact	Same as the PP	Same as the PP
Agriculture Resources	No Impact	Same as the PP	Same as the PP
Air Quality	Less than Significant Impact	Similar to the PP	More than for the PP but still Less than Significant
Biological Resources	Potentially Significant but Mitigable to Less than Significant Impact	Similar to the PP	Similar to the PP
Cultural Resources	Potentially Significant but Mitigable to Less than Significant Impact	Similar to the PP	Similar to the PP
Geology and Soils	Less than Significant Impact	Similar to the PP	Less than or similar to the PP based on location
Hazards and Hazardous Materials	Less than Significant Impact	Similar to the PP	Similar to the PP

Table 5-1: Comparison of Alternatives

Section	Proposed Project (PP)	Alternative B	Alternative C
<b>Hydrology and Water Quality</b>	Less than Significant Impact	Similar to the PP	More than for the PP but still Less than Significant or slightly less than the PP based on location
<b>Land Use and Planning</b>	Less than Significant Impact	Similar to the PP	Similar to the PP
<b>Mineral Resources</b>	No Impact	Same as the PP	Same as the PP
<b>Noise</b>	Less than Significant Impact	Similar to the PP	Similar to the PP
<b>Population and Housing</b>	No Impact	Same as the PP	Same as the PP
<b>Public Services</b>	No Impact	Same as the PP	Same as the PP
<b>Recreation</b>	No Impact	Same as the PP	Same as the PP
<b>Transportation and Traffic</b>	Less than Significant Impact	Similar to the PP	Similar to the PP
<b>Utilities and Service Systems</b>	No Impact	Similar to the PP	Similar to the PP

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# 6: OTHER CEQA CONSIDERATIONS

## 6.1 Mandatory Findings of Significance

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This section discusses broader questions posed by CEQA. These include significant effects that cannot be mitigated to less than significant levels, irreversible/irretrievable commitment of resources, the balance between short- and long-term uses of the environment, growth-inducing impacts, and cumulative impacts.

### 6.1.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF PROPOSED PROJECT THAT CANNOT BE MITIGATED TO INSIGNIFICANCE

The Proposed Project would not result in any significant impacts with implementation of SCE proposed measures and mitigation measures.

### 6.1.2 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES; SHORT- AND LONG-TERM USES OF THE ENVIRONMENT

The CEQA Guidelines (Section 15126.2(c)) require that an environmental document identify significant irreversible environmental changes that would be caused by the project. Construction of the Proposed Project would require fossil fuels, a nonrenewable resource, to power construction vehicles. Additional resources that could be irretrievably lost could include soils (resulting from water and wind erosion in disturbed areas) and water (used for dust control).

The Proposed Project would provide a reliable source of electricity to the portions of the City of Lake Elsinore and southwestern Riverside County that comprise the Electrical Needs Area. Its construction and operation would be consistent with Federal and State policies for reliability. For these reasons, the limited, irreversible and irretrievable commitments of resources to the completion of the Proposed Project are deemed acceptable.

## 6.2 Cumulative Effects

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### 6.2.1 INTRODUCTION

Cumulative impacts are defined in CEQA as two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental effects (CEQA Section 15130 (a) and (b)). Consistent with CEQA requirements and CPUC

## 6: OTHER CEQA CONSIDERATIONS

Rule 17.1, this section of the PEA uses the methodology in Section 15130 (b)(1)(A) to analyze potential cumulative effects of the Proposed Project. Related projects near the Proposed Project that could potentially contribute to cumulative environmental effects in the area was developed in coordination with the planning staff from the City of Lake Elsinore<sup>1</sup> (see **Tables 6-1, Proposed Projects in the City of Lake Elsinore** and **6-2, Proposed Projects by SCE**). The potential for cumulative impacts associated with the Proposed Project are discussed for each resource section where a cumulative effect may occur. Cumulative impacts are addressed in this PEA to document the conclusion that the Proposed Project would not result in any considerable cumulative effects.

### 6.2.2 RELATED PROJECTS

The cumulative impact analysis considers impacts of the Proposed Project, with other known and reasonably foreseeable projects (Tables 6-1 and 6-2). The area considered in this cumulative analysis was determined by considering the distance that could feasibly cause overlapping effects for resource categories such as traffic, air, or noise. Given the minimal potential for environmental effects of the Proposed Project, the area considered for cumulative effects is relatively small. The area examined for cumulative effects includes projects with at least a portion of the activities that would occur within one mile of the Proposed Project.

### 6.2.3 SIGNIFICANCE CRITERIA

The CEQA Environmental Checklist provides significance criteria for assessing the cumulative impacts of the Proposed Projects. A project causes a potentially significant impact if:

The project has impacts that are individually limited, but cumulatively considerable, where "cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

**Table 6-1: Proposed Projects in the City of Lake Elsinore**

Proximity to Proposed Project	Project Name	Project Description	Project Status
Within 1/2 mile	Alberhill Ranch Specific Plan	Phase One: 335,412 s.f. commercial, 1,011 SFR, 550 MFR;  Phase Two: 258 SFR	Approved, under construction
Within 1/2 mile	Lakeside Palms (TM 32768)	369 SFR	Approved
Source: City of Lake Elsinore, 2007.			

<sup>1</sup> Personal communication with Wendy Worthey, Principal Environmental Planner, City of Lake Elsinore. March 15, 2007.

**Table 6-2: Proposed Projects by SCE**

Proximity to Proposed Project	Project Number	Name/Type	Location	Size	Description	Estimated Construction Date
<b>DSP Projects</b>						
7 miles	N/A	Ivyglen Substation	Located in unincorporated Riverside County, on the south side of Temescal Canyon Road between Maitri Road and I-15	N/A	Increase transformer capacity from 28 MVA to 56 MVA and add 2 12 - kV circuits	2008
<b>Subtransmission Line Projects</b>						
<1 mile	N/A	Valley-Ivyglen 115 kV Subtransmission Line Project	Located in unincorporated Riverside County	N/A	Install new 115 kV subtransmission line	2009
Source: SCE 2007						

## 6.2.4 CUMULATIVE IMPACTS

### Overview

The Proposed Project would result in less than significant impacts to all environmental resource categories with mitigation incorporated. However, incremental impacts of the Proposed Project, when added to other past, present, or reasonably foreseeable future projects would have the potential to result in cumulatively considerable impacts to:

- Aesthetics
- Air Quality
- Biological Resources
- Noise
- Traffic and Transportation

### **Aesthetics**

The Proposed Project would incrementally contribute to the changing visual landscape in the Project region. That change is being led by new residential, commercial, and industrial

development, which will be served by the Proposed Project. Proportionately, the addition of the Proposed Project would only add a minor incremental change to the existing visual landscape when considered within the context of the Project region's on-going development activity.

### ***Air Quality***

The Project region is a current center of development and construction activity. Because of the underlying natural setting, much of the development activity requires substantial grading and earthwork prior to the actual construction process. It is probable that construction of the Proposed Project would occur concurrently with other construction in the project region, resulting in a cumulative contribution of airborne emissions to the airshed. Fugitive dust and equipment combustion emissions from the construction of several projects in the area may lead to cumulative dust emissions in the area.

The Proposed Project would comprise only a small fraction of the overall regional construction and construction emissions. The Proposed Project, even though it would not on its own exceed any air emissions standards with implementation of SCE measures, would have an incremental contribution to a cumulative air quality effect from the large-scale construction occurring in the Project Area.

The Proposed Project after construction would have no long-term air quality impacts, and therefore, would not be cumulatively considerable.

### ***Biological Resources***

The Proposed Project will incrementally contribute to the changing biological landscape in the Project Area. Site degradation and decline of the spineflower population could occur as a result of invasion and increased dominance by weedy native and non-native plant species. When considered with implementation of proposed Mitigation Measure Bio-7 the Proposed Project would not result in a cumulatively considerable impact.

### ***Noise***

Simultaneous construction across the Project region could generate considerable noise. The noise would not likely be considerable because sensitive receptors are limited (people would not be living within subdivisions when they are under construction).

Operation of the Proposed Project would not generate long-term noise that would combine with other noise generated in the Project Area.

### ***Traffic and Transportation***

Construction of the Proposed Project would coincide with other construction activities in the Project region. The cumulative effect of construction traffic for the Proposed Project and all other construction activities in the region may temporarily reduce levels of service on roadways, especially affecting non-construction traffic traveling through the region. When considered with all the other development in the area, and implementation of SCE Proposed Measures, the



traffic associated with the Proposed Project would not result in a cumulatively considerable impact.

The limited number of site visits required for operation and maintenance of the Proposed Project would not result in any potentially significant long-term traffic or transportation-related impacts.

### **6.3 Growth Inducing Effects**

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The potential for a substation project, such as the Proposed Project, to induce or accommodate growth does not mean that it would actually result in growth. Local governments in California can significantly increase and decrease growth potential through the creation and implementation of policies that are specifically designed to promote or minimize growth. The creation of jobs, land development, and the necessary supporting infrastructure are also needed to support existing and planned future populations.

The Proposed Project will serve the Electrical Needs Area. The electric utilities infrastructure does not induce growth, but rather follows it and is necessary to accommodate existing and planned demand.

The Proposed Project would not induce population growth. SCE would draw the labor required for construction from its current workforce or contractors. The limited, temporary nature of this employment would not result in long-term growth in the area. In addition, no long-term employment would occur in association with the operational phase of the Proposed Project.

The Proposed Project would ensure that the system would be able to meet current and future electrical substation requirements in the area without encouraging additional growth. No significant effects related to growth inducement would occur associated with the Proposed Project.

### **6.4 Indirect Effects**

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This section discusses CEQA Guidelines Section 15358 (a)(2) and CPUC PEA Guidelines requirements for addressing potential indirect impacts of a proposed project. Indirect effects are those impacts resulting from the development of a project (both construction and operation-related impacts) that occur either after implementation of the project or at some distance away from the project. General examples of indirect effects include impacts resulting from development that could change land use patterns, population density or growth rate, and result in impacts on environmental conditions, such as air quality, water quality and other natural systems.

The Proposed Project would not result in any indirect effects that would be significant after mitigation. Indirect effects have been assessed in Chapter 4 of this PEA and no other significant indirect effects would occur.

## 6.5 Conclusion

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The Proposed Project would not result in any long-term significant, cumulative, growth-inducing, or indirect environmental impacts with implementation of SCE's proposed measures and mitigation measures outlined in Chapter 4 of this PEA.

## 6.6 References and Communications

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Remy, Michael et. al. Guide to the California Environmental Quality Act (CEQA). October 1999.  
Solano Press Books. Point Arena, California.  
Worthey, Wendy. City of Lake Elsinore, Principal Environmental Planner. March 2007

# **APPENDIX A: ENVIRONMENTAL CHECKLIST FORM**



**APPENDIX A**  
**Environmental Checklist Form**

**1. Project title:**

Fogarty Substation Project

**2. Lead agency name and address:**

California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, California 94102-3298

**3. Contact person and phone number:**

Mr. Jack Horne  
Project Manager – Regulatory Policy and Affairs  
Southern California Edison Company  
(626) 302-4828

**4. Project location:**

City of Lake Elsinore in southwestern Riverside County.

**5. Project sponsor's name and address:**

Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, California 91770

**6. General plan designation:**

Specific Plan Area

**7. Zoning:**

R1 – Single Family Residential

**8. Description of project:**

Southern California Edison Company (SCE) proposes to construct the Fogarty Substation Project (Proposed Project). The Proposed Project includes the following components:

- Construction of a new 115/12 kilovolt (kV) substation (Fogarty Substation). The Fogarty Substation would be an unmanned, automated, low-profile, 56 mega volt-ampere (MVA) 115/12 kV substation
- Installation of three tubular steel poles (TSPs) to support two new 115 kV subtransmission line segments approximately 200 feet each, connecting the Valley-Elsinore-Ivyglen 115 kV subtransmission line to Fogarty Substation
- Construction of six underground 12 kV distribution circuits

## APPENDIX A – ENVIRONMENTAL CHECKLIST FORM

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- Installation of new fiber optic cable and communication equipment to connect the Fogarty Substation to SCE's existing telecommunication system

### 9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The site proposed for the Fogarty Substation is currently vacant and is situated in a rural area of the northwestern part of the City of Lake Elsinore that contains dispersed single-family residences and associated non-residential structures. The Proposed Project would be located adjacent to the future Alberhill Ranch and Lakeside Palms residential developments. A spot elevation near the center of the Proposed Project Site places its elevation at approximately 1,330 feet. The existing Valley-Elsinore-Ivyglen 115 kV subtransmission line traverses the property along the north side.

### 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                    | <input type="checkbox"/> Agriculture Resources              | <input type="checkbox"/> Air Quality            |
| <input type="checkbox"/> Biological Resources          | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology /Soils         |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality          | <input type="checkbox"/> Land Use / Planning    |
| <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population / Housing   |
| <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems   | <input type="checkbox"/> Mandatory Findings of Significance |   |

#### DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the

- ☐ environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Signature

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Date

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Signature

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Date

**EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).



## APPENDIX A – ENVIRONMENTAL CHECKLIST FORM

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- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats;

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**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

- 9) The explanation of each issue should identify:
- a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

**SAMPLE QUESTION**

Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>II. AGRICULTURE RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>III. AIR QUALITY:</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IV. BIOLOGICAL RESOURCES:</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate,	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>V. CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## APPENDIX A – ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
resource pursuant to '15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>VI. GEOLOGY AND SOILS:</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VII. HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>VIII. HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Proponent's Environmental Assessment  
Fogarty 115 kV Substation Project



**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IX. LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>X. MINERAL RESOURCES:</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XI. NOISE:</b> B Would the project result in:				
a) Expose persons to or cause generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Expose persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XII. POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
replacement housing elsewhere?				
<b>XIII. PUBLIC SERVICES:</b>				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XIV. RECREATION:</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XV. TRANSPORTATION/TRAFFIC:</b> Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## APPENDIX A – ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XVI. UTILITIES AND SERVICE SYSTEMS</b>				
<b>B: Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have in sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Sources and Explanation of Answers

This section contains a brief explanation for all answers provided in the environmental checklist form.

### I. AESTHETICS

The Proposed Project is situated on a broad valley floor at an elevation of approximately 1,300 feet. Viewshed-defining ridgelines to the north, west, and southeast reach elevations of 1,600 feet, 1,560 feet, and 1,741 feet, respectively. Construction and operation activities on the floor of the valley at the Proposed Project Site would not be seen in distant views (of approximately one mile) from the I-15 Freeway. Distant views of the above ridgelines as seen from the I-15 Freeway would also not be interfered with by any construction activity undertaken on the Proposed Project Site.

The City of Elsinore's zoning maps for the Fogarty Substation site location and its immediate surroundings do not designate the area as falling within a Scenic Overlay District. Therefore, zoning policies and provisions specifically designed to address community-identified scenic resources that pertain to Scenic Overlay District areas do not apply.

The Proposed Project Site is devoid of distinguishing natural or man-made visual elements that would be considered scenic. Site clearing, grading and construction of permanent facilities at the Proposed Project Site would not substantially impact on-site visual resources, as none of the distinguishing surface characteristics of the site are considered to be scenic. Further, the Proposed Project Site's low valley floor location relative to the surrounding hill terrain effectively places its surface out of view from the I-15 Freeway, a State "eligible" Scenic Highway<sup>1</sup>. The Proposed Project Site is also located approximately 3,400 feet northeast of Lakeshore Drive, a City of Lake Elsinore designated Scenic Corridor. However, intervening development and distance eliminates potential views of the Proposed Project Site from this route.

Construction of the Proposed Project would not introduce significant sources of light or glare into the area. TSPs for the Proposed Project would be ordered with a flat finish and would continue to weather and dull over time. The impacts related to light and glare would be less than significant. Construction activities would not be conducted at night. For the duration of the construction period night lighting consistent with security needs of the construction site would be visible from offsite until the perimeter wall and gate have been completed. The amount of night lighting introduced early during the construction period is not considered significant. Security lighting illuminating portions of the perimeter of the completed substation would likely remain visible. However, such exterior security lighting would adhere to City of Lake Elsinore regulations pertaining to shielding and focus of lighting to control spill over lighting effects and glare into surrounding areas.

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<sup>1</sup> The I-15 Freeway, located approximately one mile to the northeast of the Proposed Project Site is classified as an "eligible" State Scenic Highway. Meaning that it may be a candidate for "official designation" in the future, but it is not currently designated as a State Scenic Highway.

## **II. AGRICULTURAL RESOURCES**

The proposed construction and operation of the Fogarty 115 kV Substation would have no impact on agricultural lands or operations. The Proposed Project would not convert prime farmland, unique farmland, or farmland of statewide importance, to nonagricultural use. No Prime Soils (Capability Classes I and/or II) exist on site or in its immediate vicinity. Therefore, the Proposed Project has no impact on the conversion of farmland to nonagricultural use. Furthermore, The Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The Proposed Project is not subject to a Williamson Act contract, nor does it abut any properties that are subject to such a contract. Thus, the Proposed Project would result in no impact to existing zoning for agricultural use, or a Williamson Act contract.

## **III. AIR QUALITY**

Air quality impacts associated with the Proposed Project would be limited to fugitive dust and combustion emissions resulting from construction. Impacts related to periodic maintenance would be negligible, as only a few vehicles would be needed for short periods of time. Impacts to air quality would not be significant with the implementation of Applicant Proposed Measures.

Construction would generate dust and exhaust emissions. The SCAQMD regional criteria and the Local Significance Thresholds (LSTs) were considered during the impact analysis. Sensitive receptors include schools, residential areas, and other sensitive uses, such as parks. LSTs are intended to minimize the local effects to sensitive receptors. The Proposed Project would not exceed LST values for the area during construction. Sensitive receptors are not within 100 meters of the Proposed Project and air quality impacts to sensitive receptors from the Proposed Project would not be significant.

Any odors that are perceptible would be temporary. Impacts associated with odors would not be significant.

## **IV. BIOLOGICAL RESOURCES**

The greatest potential impacts to biological resources resulting from the Proposed Project are impacts to native and nonnative vegetation communities and populations of special-status species. Impacts would be associated predominately with construction activities. Applicant Proposed Measures and Mitigation Measures would limit impacts to less than significant.

The potential adverse impacts to habitats associated with special-status plant species can be limited to less than significant levels by the implementation of Applicant Proposed Measures and Mitigation Measures during construction and operation activities. SCE compliance with the Western Riverside County MSHCP will additionally mitigate for any impacts to sensitive plant species that are covered in the Plan.



## **APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

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The establishment of nonnative weeds could affect special status species associated with the surrounding habitat and could therefore be considered potentially significant if not mitigated. As a means of avoiding and minimizing impacts due to nonnative species, implementation of Applicant Proposed Measures during construction and the implementation of additional mitigation will reduce the potential impacts associated with the establishment of nonnative weeds and invasive plants to less than significant.

Several special-status wildlife species currently occur, historically occurred, or have the potential to occur within the Proposed Project Site. These species include orange-throated whiptail, coast horned lizard, loggerhead shrike, coastal California gnatcatcher, and San Diego black-tailed jackrabbit, additional species are included in Table 4.4-2 of the PEA. Impacts to these sensitive terrestrial wildlife resources as a result of the Proposed Project are likely to occur from construction activities. Direct impacts to special-status wildlife species, habitat removal, and impacts from human noise and lighting will be less than significant through implementation of a combination of Applicant Proposed Measures and mitigation measures with the addition of preconstruction focused surveys for each species.

All tree removal and trimming required for the Proposed Project will be conducted during the non-nesting season, for most special-status and non-special-status migratory birds, to the extent feasible. A qualified wildlife biologist will conduct a pre-construction survey for nesting birds for tree trimming or other potential nest-disturbing activities that will be conducted from March 1 through August 15. The survey will be conducted no more than one week prior to the start of work activities and will cover all affected areas where substantial ground disturbance or vegetation clearing is required. The biologist will establish an appropriate exclusionary work zone on a site-specific basis if active nests are present. Proposed Project vehicles, chain saws, or heavy equipment will not be operated within this exclusionary zone, to the extent feasible, until nesting season is over or the biologist has determined that nesting is finished and the young have fledged. Potential impacts would be reduced to less than significant levels.

### **V. CULTURAL RESOURCES**

No prehistoric or historic cultural resources have been previously recorded within the Proposed Project Site. However, there are two recorded sites located within one-half mile of the Project Site. Site CA-RIV-5784H is a foundation and associated features from a house shown on the topographic map dated 1953 and site CA-RIV-3832H is an abandoned railroad grade originally constructed by the Atchison, Topeka & Santa Fe Railway in 1896 and taken out of service in the early 1980s.

The Proposed Project would not cause a substantial adverse change in the significance of an historical resource as defined in §15064.5. Construction of the proposed Fogarty Substation would have no impact of cultural resources. No prehistoric or historical-period cultural resources were observed during the field survey of the Proposed Project Site. The record search showed there are no previously recorded sites within the Proposed Project Site.

Construction of the Proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The Proposed Project Site is located on surface exposures of the fossiliferous Silverado Formation, which dated to the Paleocene Epoch, and is overlain by a thin sedimentary veneer of Holocene alluvium. Although Holocene surface sediments in the Project Area have low paleontological sensitivity, the Silverado Formation has a high potential to contain significant paleontological resources and is assigned high paleontological sensitivity. Due to the high paleontological sensitivity of the area, ground disturbing construction activities have the potential to unearth a unique paleontological resource, the destruction of which would be a significant adverse impact. Applicant Proposed Measures would avoid significant impacts to cultural resources.

There are no historically recorded cemeteries located within the Proposed Project Site. No impact to human remains or archeological resources is anticipated. Incorporation of Applicant Proposed Measures would ensure impacts to archeological resources or human remains, if encountered during construction, are less than significant.

## **VI. GEOLOGY AND SOILS**

The Proposed Project Site lies within a recent alluvial valley in an area where eroded older alluvial fan (symbol Qoa) and soft bedrock formations (Silverado Formation (symbol Tsi)) meet. The soils present at the site are associated with either (1) the weathering of the Silverado Formation and the older alluvium, or (2) the deposition of alluvial materials in the recent drainages are predominantly derived from granitic rocks in the Santa Ana Mountains to the west. Soils derived from the Silverado Formation include the Altamont [AbF] soils and the Ramona [RaB2] soils, together covering approximately two-thirds of the Project Area. Soils derived from the weathering of the Santa Ana Mountains include the Placentia [PID], which covers approximately one-third of the Project Area.

Soils and geologic effects associated with the construction of the Proposed Project would be limited to erosion during construction activities and seismic hazards during operation. SCE's best management practices (BMPs) would be implemented to minimize soil erosion for all construction components. Seismic hazards are reduced or avoided in the design of the Proposed Project. The Proposed Project construction and operation would not result in significant impacts related to soils and geology.

BMPs, including erosion control measures, would be included as part of the Construction Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would be implemented during construction to minimize erosion and sedimentation during grading. Use of existing roads for access would be maximized. New service roads would be compacted and gravel would be used in areas where soils may be susceptible to erosion.

Geotechnical studies would be conducted prior to construction. The studies would evaluate the presence and extent of expansive or collapsible soil for all aspects of the Proposed Project.

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Standard design practices are available and would be used to mitigate hazardous soil conditions, if encountered. Standard practices require soil at the substation site to be compacted.

Substation equipment would be engineered and constructed to minimize damage caused by strong ground shaking and moderate deformation. Sever ground shaking also has the potential to cause human injury. The substation would be unattended and SCE personnel would only visit for periodic maintenance or emergency repairs. Potential effects to workers from seismic activity would be less than significant.

### **VII. HAZARDS AND HAZARDOUS MATERIALS**

Hazardous materials and potential hazards associated with the construction, operation, and maintenance of the Proposed Project would be limited to less than significant risk by proper management, disposal, and other precautionary measures. Impacts of the Proposed Project would not cause significant environmental or health and safety impacts.

Hazardous materials that would be used during construction of the Proposed Project would include gasoline, diesel fuel, oils, solvents, and lubricants from construction vehicles. There are no feasible alternatives to these materials for operation of construction vehicles and equipment. However, best management practices would be implemented during construction to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. Therefore, construction of the Proposed Project would have less than significant impacts associated with hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Due to the low volume and low toxicity of the hazardous materials that would be used during construction, the potential for environmental impacts from hazardous material incidents during construction is less than significant. In addition, a site specific Construction Storm Water Pollution Prevention Plan (SWPPP) would be developed (see Section 4.8, Hydrology and Water Quality for more detail) and implemented for construction of the Proposed Project.

Construction of the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. However, the existing grasslands adjacent to the Proposed Project Site are prone to wildfires and could be ignited if proper fire prevention measures are not implemented. The impact of the Proposed Project on the potential exposure to wildland fires would be reduced to a less than significant level through the implementation of SCE fire prevention protocols.

### **VIII. HYDROLOGY AND WATER QUALITY**

Construction of the Proposed Project would not violate any water quality standards or waste discharge requirements. The Proposed Project facility design will include full consideration of the potential for erosion and release of potential groundwater and surface water contaminants.

Compliance with NPDES and the August 15, 1996, the State Water Resources Control Board (SWRCB) General Permit for discharges from utility vaults and underground structures to surface waters will be required. This will include the requirement to implement appropriate Pollution Prevention Practices (PPPs), which are equivalent to BMPs. By complying with existing regulations the Proposed Project would not violate water quality or waste discharge regulations, and would not introduce pollutants into the surface water or groundwater to degrade water quality.

The agency for water quality issues in the region of the Proposed Project is the SARWQCB. For administering the NPDES, the SARWQCB requires a General Construction Activity Storm Water Permit for storm water discharges associated with any construction activity including clearing, grading, excavation reconstruction, and dredge and fill activities that results in the disturbance of at least one acre of total land area. As the Proposed Project would disturb more than one acre, a Storm Water Pollution Prevention Plan would be required for compliance. After implementation of the Construction SWPPP (HYDRO-SCE-1), impacts to water quality standards would be less than significant.

Construction activities conducted when the ground is wet also creates the potential for increased runoff due to a deduction in infiltration and evaporation through vegetation removal. However, with implementation of Applicant Proposed Measures to control erosion, impacts would be less than significant.

Diesel fuel, lubrication oils, hydraulic fluids, antifreeze, and other construction-related materials would have a limited likelihood of affecting surface water quality. Drips and spills would be contained on-site before they could be released to storm water. Surface water flow on the site is presently overland on native soil with a less than one percent ground slope generally to the east and northeast. A small arroyo-type drainage swale occupies the northeast corner of the property, most of which lies outside of the Proposed Project Site. Final site grades will maintain a slight slope to the east and necessitate filling the low area of the swale blocking flow from up stream. This will require construction of a flow by-pass to maintain the small amount of runoff now continuing across this area. Although water use generated on the site will be very small, SCE proposes to construct a small on-site fenced retention basin on the east side of the property to contain precipitation- and man-made runoff so that it does not exit the developed area. Once a local storm runoff system is functional near the site, the storm water runoff from the substation may or may not then be diverted to that system.

## **XI. LAND USE AND PLANNING**

Construction, operation, and maintenance of the Proposed Project would not divide any community or conflict with any applicable local plans or policies. Construction impacts of the Proposed Project are considered short-term and temporary and would not conflict with any applicable environmental plans, policies, or regulations of an agency with jurisdiction over the Proposed Project (including, not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

## APPENDIX A – ENVIRONMENTAL CHECKLIST FORM

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As a result, the land use and planning impacts from the construction of the Proposed Project on applicable plans, policies and regulations would be less than significant.

The Proposed Project is located within a MSHCP Criteria Cell. SCE is a “*Participating Special Entity*” under the implementation agreement, and as such SCE is not required to file a request for consistency with the City of Lake Elsinore. However, as discussed in Section 4.4, Biological Resources, construction of the Proposed Project would not significantly impact any species covered by the MSHCP. The land use impacts on these plans from construction are expected to be less than significant.

### **X. MINERAL RESOURCES**

Construction of the Proposed Project would not result in the loss of availability of a known or locally important mineral resource that would be of value to the region and the residents of the state. The SMARA established the mineral resource classification system, which is used to determine an area’s mineral resource value. The Proposed Project Site is located in an area classified as MRZ-3. The Proposed Project is not located on land known to contain an important mineral resource. Therefore, no impact to mineral resources would occur during the construction or operation of the Proposed Project.

### **XI. NOISE**

Noise and vibration impacts associated with the Proposed Project would be the result of temporary short-term construction impacts. Typical Proposed Project construction would not cause significant noise impacts. Residents would experience significant noise level for brief periods of time during construction.

A substation is not a noise-sensitive land use for siting purposes. Any possible noise constraint for the Proposed Project would thus derive from site-generated noise affecting the closest residences as no other potentially sensitive receptor sites, such as public parks, schools, or hospitals are located nearby. The construction time limits and the performance standards in the Lake Elsinore Municipal Code are designed to maintain noise impacts at acceptable levels. The allowable average hourly daytime noise exposure at the nearest single-family residence is 75 dB. The reference noise level for one or two pieces of heavy equipment operating during any hour is 85 dB at 50 feet with variable duty cycles and equipment mobility. A sufficient set-back to achieve -10 dB of geometrical spreading losses is needed to maintain a less-than-significant impact. If construction were to occur at night, or on Sundays or holidays, the standard would be reduced to 60 dB. A reduction of 25 dB is needed to achieve this level.

Construction of the Proposed Project is only temporary and would not create a substantial permanent noise increase. Therefore, construction of the Proposed Project would have no impact on substantial permanent noise.

Operation of the Proposed Project would not create a substantial permanent noise increase. The transformer “hum” and fan noise is semi-continuous (more than 30 minutes), and the station will operate at night. Therefore, the most stringent noise standard of 40 dB thus applies to the Proposed Project. The reference noise level from two 28 MVA (115/12 kv) transformers is 66 dBA or less at 3 feet from the equipment, or approximately 10 feet from the transformer core. Noise decays at 6 dB per doubling of distance. The calculated distance to the 40 dB City nocturnal noise standard under clear line of sight conditions is 200 feet. The transformers will be located more than 200 feet from any residence.

The 8 foot high masonry block wall surrounding the transformer and switching equipment will additionally attenuate noise. The noise reduction effectiveness of the wall is at least -10 dB. With the planned perimeter wall, the noise impact zone is reduced to 63 feet from the center of equipment noise generation. There are no noise-sensitive uses within the Proposed Project noise impact envelope.

The equipment source strengths, the planned 8 foot high block wall barriers, and the 20 foot by 34 foot set-backs from adjacent street ROWs when coupled with the 80 foot and 90 foot ROW widths of the adjacent streets and subsequent set back distances of the two existing residences nearest the Proposed Project Site combine to create conditions that are more than adequate to maintain a less than significant operational noise impact.

Construction and operation impacts will be less than significant. Furthermore, implementation of Applicant Proposed Measures will lessen impacts.

## **XII. POPULATION AND HOUSING**

The construction and operation of the Proposed Project would not displace any people of housing. The Proposed Project was designed to meet the projected demands of planned development, and therefore, would not induce substantial population growth in the area, either directly or indirectly. The Proposed Project would not displace housing or have a significant negative impact on population or housing.

## **XIII. PUBLIC SERVICES**

The Proposed Project would not significantly affect service ratios, response times, or other objectives for public services in the area. An area's population largely affects the need for public services. As a population grows, the need for services such as fire and police protection, schools, and libraries increase. The Proposed Project is unmanned and would not increase the residential population in the area.

## **XIV. RECREATION**

The Proposed Project would not result in an increase in the number of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of



## **APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

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the facilities would occur or be accelerated. The Proposed Project would not include recreational facilities or require the construction of recreational facilities that might have an adverse effect on the environment. Construction, operation and maintenance of the Proposed Project would have no impact on parks or recreational facilities.

### **XV. TRANSPORTATION AND TRAFFIC**

Construction of the Proposed Project would not cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Construction traffic would access the Proposed Project Site via Terra Cotta Road. All construction material and equipment for the Proposed Project, including the transformers and tubular steel poles (TSPs), would be delivered by truck to the site roadway to Terra Cotta Road from either Lakeshore Drive, approximately 4,100 feet to the south, or the I-15 Freeway and Nichols Road approximately 6,600 feet to the northwest. Access via Terra Cotta Road from Lakeshore Drive would traverse approximately 1,800 feet of paved road through single-family residential neighborhoods and approximately of 2,300 feet of dirt road through a landscape distinguished by dispersed single-family residences. The northerly route connecting Terra Cotta Road with the Nichols Road interchange on the I-15 Freeway traverses approximately 1,320 feet of a paved portion of Nichols Road adjacent to the I-15 Freeway and 5,280 feet of dirt roads that pass through largely undeveloped and vacant areas containing few single family residences.

The majority of the truck traffic to the site would use major streets and the I-15 Freeway to the Nichols Road freeway exits. Grading activity is in progress for the re-alignment and improvement of Nichols Road to provide a Major Highway connection between the I-15 Freeway and Lake Street across the Alberhill Ranch. The route will replace the existing dirt road route segments of Nichols Road, Coal Avenue, and Coal Road that now link to provide the most direct access from the Proposed Project Site to the I-15 Freeway. Traffic related impacts during construction of the Proposed Project are anticipated to be less than significant.

Truck traffic would be scheduled during off-peak traffic hours to the extent feasible. However, some such as cement truck deliveries may need to be made during peak hours when footing work is being performed. The transformers and TSPs would be delivered by heavy transport vehicles and be off-loaded on-site by large cranes with support trucks. Construction of the proposed substation may precede the completion of paving and/or roadway width improvements to Terra Cotta Road and the likely access roads between the end of pavement of Nichols Road west of the on- and off-ramps to the I-15 Freeway. Under this condition, SCE would be required to construct an improved temporary driveway access at the front of the proposed substation within the ROW of Terra Cotta Road.

During construction of the two new overhead 115 kV line segments, approximately 200 feet each, and trenching for the telecommunication line, single lane closures are not anticipated.



However, in the event that such a closure is necessary, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee, 1996) (see Applicant Proposed Measure TRANS-SCE-2 of Section 4.15 Transportation and Traffic).

The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including emergency access. All construction activity would occur on the Proposed Project Site and no activities are planned that would affect response by police, fire, ambulance, or paramedic vehicles. Therefore, there would be no impact associated with emergency access.

Proposed Project construction would require an estimated maximum of 25 employees. The Proposed Project Site and the surrounding vicinity, including the vacant Dryden site, provides adequate parking capacity. In addition, the applicant proposes measures to encourage carpooling by construction personnel. Construction of the Proposed Project would result in less than significant impacts to parking capacity.

Operation and maintenance of the Proposed Project would have negligible impacts on the ground transportation system (roadways and railroads) under normal circumstances because the inspection and maintenance activities would generate only a very small volume of vehicular traffic (one or two trucks). Operational impacts of the Proposed Project would be less than significant.

## **XVI. UTILITIES**

The potential impacts to public utilities from construction and operation of the Proposed Project would not be significant. Construction of the Proposed Project would not require large amounts of water. Wastewater generated on-site would be nominal and portable toilets would be utilized during construction. The Proposed Project would not discharge wastewater or exceed local water treatment requirements. No new or expanded water, water entitlements, or wastewater treatment facilities would be required for the Proposed Project. Construction of the Proposed Project would increase reliability and capacity of the electrical service system in the area. Operation would not adversely affect public utilities and no detrimental effects would occur as a result of the construction and operation of the Proposed Project.

## **XVII. MANDATORY FINDINGS OF SIGNIFICANCE**

The Proposed Project would have a limited potential to degrade the quality of the environment, reduce wildlife and plant habitat, reduce the numbers or range of a rare, threatened, or endangered species, temporarily create noise levels in excess of standards, alter the existing drainage patterns, and affect traffic circulation. The Proposed Project would also have a potentially adverse affect on cultural resources. However, implementation of mitigation measures would result in less than significant impacts for all resource categories.

## **APPENDIX A – ENVIRONMENTAL CHECKLIST FORM**

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The Proposed Project and alternatives would not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

The Proposed Project and alternatives would not lead to impacts that are individually limited, but cumulatively considerable.

The Proposed Project and alternatives would not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

# **APPENDIX B: LIST OF PREPARERS**



# APPENDIX B: LIST OF PREPARERS

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## List of Preparers – Fogarty Substation

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This section lists those individuals who either prepared or participated in the preparation of this Proponents Environmental Assessment.

### **PROPONENT - SOUTHERN CALIFORNIA EDISON COMPANY**

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## APPENDIX B - LIST OF PREPARERS

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## **Agencies and Persons Contacted**

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The following agencies and persons were contacted during the preparation of this document.

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Wendy Worthey	City of Lake Elsinore, Principal Environmental Planner
Cher Quinones	Development & Records Coordinator, EVMWD

**APPENDIX C:  
LIST OF AFFECTED  
PROPERTY  
OWNERS**



**FOGARTY SUBSTATION - PREFERRED SITE ALTERNATIVE A**  
**300' RADIUS OWNERSHIP LISTING**

APN	OWNER NAME	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP	SITUS ADDRESS	SITUS CITY/STATE/ZIP	Land Use
389-090-002	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-090-003	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-090-004	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-090-006	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-090-007	AT & SF RR	740 CARNEGIE DR	SAN BERNARDINO	CA	92408	N/A/AVAIL	CA	N/A/AVAIL
389-121-001	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-121-002	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-121-003	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-001	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-002	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-003	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	RESIDENTIAL LOT
389-122-005	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-006	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-007	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-008	LEWIS DAVID W	PO BOX 911	LAKE ELSINORE	CA	92531	16470 KINGS HWY	LAKE ELSINORE CA 925	SFR
389-122-009	EDWARDS SARAH	22482 WALNUT DR	WILDOMAR	CA	92595	N/A/AVAIL	CA	VACANT LAND (NEC)
389-122-010	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-131-002	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	VACANT LAND (NEC)
389-131-003	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	VACANT LAND (NEC)
389-131-004	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	VACANT LAND (NEC)
389-131-006	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	28827 MAIN ST	LAKE ELSINORE CA 925	SFR
389-131-007	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	VACANT LAND (NEC)
389-131-008	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	VACANT LAND (NEC)
389-132-001	RODRIGUEZ AMELIA & ISAAC	19273 CONSUL AVE	CORONA	CA	92881	28885 TERRA COTTA RD	LAKE ELSINORE CA 925	SFR
389-132-003	RODRIGUEZ AMELIA & ISAAC	19273 CONSUL AVE	CORONA	CA	92881	28885 TERRA COTTA RD	LAKE ELSINORE CA 925	SFR
389-141-002	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	COMMERCIAL (NEC)
389-142-001	BOUCHER DONALD EDMOND	7200 MCLODY LN NO 56	LA MESA	CA	91942	N/A/AVAIL	CA	RESIDENTIAL LOT
389-142-002	MALETTA PAMELA A	1707 PINYON CIR	CORONA	CA	92882	N/A/AVAIL	CA	VACANT LAND (NEC)
389-142-003	MALETTA PAMELA A	1707 PINYON CIR	CORONA	CA	92882	N/A/AVAIL	CA	VACANT LAND (NEC)
389-142-004	VELARDE LUPE	N/A/AVAIL	FONTANA	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	CA	RESIDENTIAL LOT
389-142-005	VELARDE LUPE	N/A/AVAIL	FONTANA	N/A/AVAIL	N/A/AVAIL	28804 HOFF ST	LAKE ELSINORE CA 925	SFR
389-142-006	GODINA MANUEL J & DONNA L	28809 TERRA COTTA RD	LAKE ELSINORE	CA	92530	28809 HOFF AVE	LAKE ELSINORE CA 925	SFR
389-142-007	GODINA MANUEL J & DONNA LEE	28809 TERRA COTTA RD	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-142-008	GODINA MANUEL & DONNA	28809 TERRA COTTA RD	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-142-009	GODINA MANUEL & DONNA	28809 TERRA COTTA RD	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-003	LEVENSON NORMAN & DOROTHY A	4120 ANDROS WAY	OCEANSIDE	CA	92056	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-008	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-009	AT & SF RR	740 CARNEGIE DR	SAN BERNARDINO	CA	92408	N/A/AVAIL	CA	N/A/AVAIL
389-154-004	REED YOKO	22610 PIN TAIL DR	CANYON LAKE	CA	92587	N/A/AVAIL	CA	VACANT LAND (NEC)
389-154-006	REED YOKO	22610 PIN TAIL DR	CANYON LAKE	CA	92587	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-003	LEVENSON NORMAN & DOROTHY A	4120 ANDROS WAY	OCEANSIDE	CA	92056	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-008	CASTLE & COOKE ALBERHILL RANCH	17600 COLLIER AVE STE C120	LAKE ELSINORE	CA	92530	N/A/AVAIL	CA	VACANT LAND (NEC)
389-151-009	AT & SF RR	740 CARNEGIE DR	SAN BERNARDINO	CA	92408	N/A/AVAIL	CA	N/A/AVAIL
389-154-004	REED YOKO	22610 PIN TAIL DR	CANYON LAKE	CA	92587	N/A/AVAIL	CA	VACANT LAND (NEC)
389-154-006	REED YOKO	22610 PIN TAIL DR	CANYON LAKE	CA	92587	N/A/AVAIL	CA	VACANT LAND (NEC)
389-170-003	SOUTHERN CALIFORNIA EDISON CO	PO BOX 800	ROSEMEAD	CA	91770	N/A/AVAIL	CA	RESIDENTIAL ACRES
389-180-001	CENTEX HOMES	2280 WARDLOW CIR STE 150	CORONA	CA	92880	N/A/AVAIL	CA	VACANT LAND (NEC)
N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL	N/A/AVAIL

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# **APPENDIX D: PUBLIC INVOLVEMENT**



## **Public Involvement**

Southern California Edison encourages communication and outreach to local communities, local businesses, elected and appointed officials, and other interested parties. SCE's goal is to ensure that the company understands and addresses, where possible, issues of interest or potential concern regarding its proposed projects.

The target audiences for the activities are the property owners near the Proposed Project, local communities, local businesses, elected and appointed officials, and other interested parties.

**Project Fact Sheet:** SCE developed a Project Fact Sheet (attached) and mailed it on August 30, 2006 to all property owners within 300 feet of the Proposed Project.

Additionally, the Project Fact Sheet was sent to:

- Elected and appointed officials
- Castle and Cook, via Butsko Utility Consulting Group

The fact sheet provided basic information about the Proposed Project's purpose, scope of work and proposed schedule. It also provided the name and contact information for the local SCE Regional Manager to answer questions.

### **Briefings:**

SCE personnel met with elected and appointed officials, and members of the press, who represent the area of the proposed substation to provide information on the Proposed Project.

May 3, 2006 - SCE's Project Manager, Don Johnson, met with representatives of Centex, and Castle and Cooke, developers in the area to discuss SCE's plans in the Lake Elsinore area.

May 31, 2006 - SCE's Project Manager, Don Johnson, met with Mike Sattley, Lake Elsinore Unified School district (New Schools) to discuss SCE's plans in the Lake Elsinore area.

June 1, 2006 - SCE's Project Manager, Don Johnson, met with a neighboring property owner, Manuel and Donna Godina to discuss the relocation of their driveway that runs through the Proposed Project site and electric and magnetic fields (EMF). Mr. Johnson also sent a follow-up letter on March 1, 2007 discussing the visit and the proposal to have SCE relocate the driveway at SCE's cost.

June 9, 2006 - SCE's Project Manager, Don Johnson, met with representatives of Castle and Cooke to discuss the 115 kV subtransmission lines to be installed in the area and follow-up on topics discussed at the May 3, 2006 meeting.

## **APPENDIX D – PUBLIC INVOLVEMENT**

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June 15, 2006 - SCE's Project Manager, Don Johnson, met with representatives of the Pechanga Native American tribe to discuss the Valley – Ivyglen 115 kV Project and the Fogarty Substation Project.

June 22, 2006 - SCE's Project Manager, Don Johnson, met with Mr. Bob Brady, City Manager, City of Lake Elsinore, to discuss the Valley – Ivyglen 115 kV Project and the Fogarty Substation Project.

August 16, 2006 - SCE's Project Manager, Don Johnson, conducted a media briefing with members of the Press Enterprise and the Californian newspapers to discuss the Valley – Ivyglen 115 kV Project and the Fogarty Substation Project.

October 5, 2006 - Luis Davis, Don Johnson, Fred Francia and Dave Lowerison from SCE met with Mr. Robert Brady City Manager, City of Lake Elsinore, to once again discuss the Proposed Fogarty Substation Project.

October 23, 2006 - SCE's Project Manager, Dave Lowerison also met with representatives of Castle and Cooke (developer), via Butsko Utility Consulting Group, who have housing projects under construction in the area.

January 12, 2007 - A "Notice of Proposed Construction" letter was sent from Louis Davis, SCE Region Manager, to Mr. Robert Brady, City Manager, City of Lake Elsinore, requesting the city's position on the Proposed Project. The city responded favorably in a letter dated February 22, 2007.

# Fact Sheet

## Fogarty Substation

August 2006

Important community information concerning a proposed Southern California Edison project in your area

### SOUTHERN CALIFORNIA EDISON PROPOSES NEW SUBSTATION PROJECT NORTH OF THE LAKE ELSINORE AREA

*Southern California Edison Company (SCE) proposes to construct a new 115/12 kilovolt (kV) distribution substation, Fogarty Substation, connecting to four 12 kV distribution lines and an existing 115 kV line to meet projected electrical demand requirements and improve system reliability in the northern portion of the City of Lake Elsinore and the southwestern area of Riverside County (Project Area).*

### WHY IS THE PROJECT NEEDED?

Southwestern Riverside County is one of the fastest growing regions in California. This growth has led to an increase in the area's demand for electricity. One of the new developments located within the City of Lake Elsinore is identified as Alberhill Ranch. In addition, there are several other developments planned in the project area. This projected growth will result in increased demand for electricity. Construction of the Fogarty Substation will provide continued reliable electric service.

### PROJECT LOCATION

The substation will be constructed on approximately 2.5 acres of land on the corner of Kings Highway and Terra Cotta Road. The proposed location of this facility is in the area identified in Figure 1.

### CPUC PROJECT APPROVAL PROCESS

Prior to construction, SCE must submit to the California Public Utilities Commission (CPUC) an application for the approval of the project. This application will address environmental and technical data for the project. The CPUC will review the appli-

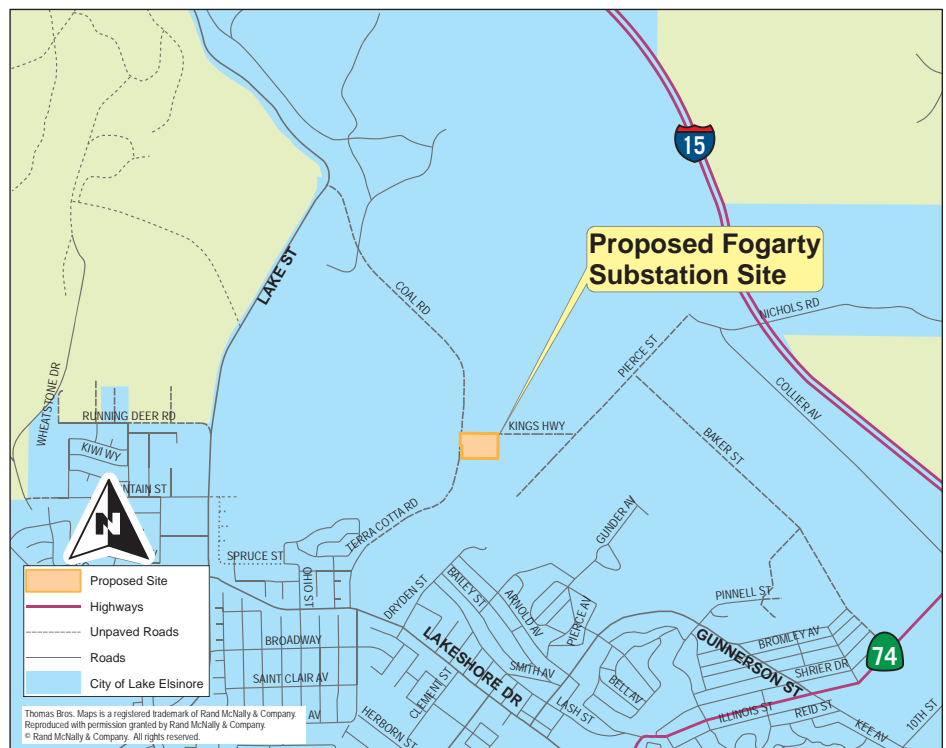


Figure 1



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cation to ensure the project's compliance with all applicable laws, including the California Environmental Quality Act (CEQA). The CPUC will then approve the project as filed, approve the project with modifications, or deny the project.

## OTHER LOCAL PROJECTS

Current and projected long-term growth in the area will result in corresponding increases in the demand for electricity. To meet these increasing needs, SCE is proposing to build other facilities in the vicinity of western Riverside County in addition to the Fogarty Project. These facilities are not directly linked to the Fogarty Project, but are part of SCE's ongoing effort to ensure reliable electric service to customers.

## CURRENT FOGARTY SUBSTATION PROJECT STATUS

SCE is currently completing environmental studies for the proposed project.

These environmental studies are prepared in compliance with environmental laws such as the California Environmental Quality Act (CEQA) and will be included in SCE's application to the CPUC. The entire application package will be thoroughly and independently reviewed by the CPUC. Prior to making a decision to approve the project, the CPUC will issue a draft environmental document pursuant to CEQA for public review.

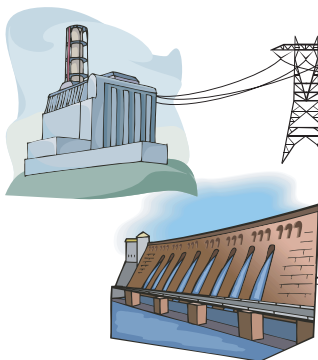
## PROPOSED PROJECT TIMELINE

<b>Early 2007</b>	SCE submits application to construct the project to the CPUC
<b>Mid 2008</b>	Proposed start of construction upon receipt of all required approvals.
<b>Mid 2009</b>	Project Completion

## ADDITIONAL INFORMATION

This project is currently in the preliminary planning phase. As the planning process advances, SCE will provide additional information to the community. In the interim, if you have any questions please contact Viet Tran, Southern California Edison Region Manager at (951) 928-8352.

### Generating Stations



### Transmission Substation

### Fogarty Distribution Substation

### Customers



## THE PATH OF ELECTRICITY

The information presented in this section is intended to provide generic information about how electricity is delivered to homes and businesses to help illustrate how the specific SCE project being proposed fits into the bigger picture of delivery of electricity. The specific components of the SCE project referred to in this fact sheet are detailed under sections entitled: "Why is the Project Needed?" and "Project Location."

Electricity is produced at power plants often located many miles away from where it is used. Transmission powerlines are the "freeways" of the electrical system, moving large amounts of electricity over long distances from these power plants toward the customers who will use it. To do this most effi-

ciently and with the least amount of energy loss along the way, the electricity must be transported at high voltages, normally ranging from 220,000 volts (220 kilovolts or 220 kV) to 500,000 volts (500 kilovolts or 500 kV).

In order for this electricity to be used by businesses and homes, however, the voltages must be first reduced through the use of transformers. These transformers are located at facilities known as substations. The voltage reduction is usually done in stages – first, 500 kV to 220 kV, then from 220 kV to 115 kV, and finally from 115 kV to 12 kV. Lower voltage distribution lines deliver power from these smaller substations to neighborhoods where it can be used by homes and businesses.



# **APPENDIX E: AGENCY CONSULTATIONS**







# STATISTICAL RESEARCH, Inc.

ARCHAEOLOGY • ANTHROPOLOGY • HISTORY • HISTORIC ARCHITECTURE

September 22, 2006

Dave Singleton, Program Analyst  
Native American Heritage Commission  
915 Capitol Mall, Room 364  
Sacramento, CA 95814

Subject: Consultation on the Fogarty substation project, Lake Elsinore area, Riverside County

Dear Mr. Singleton,

Statistical Research, Inc. (SRI), is conducting cultural resource studies for Southern California Edison Company of a project in Riverside County (see attached maps). The proposed project involves development of a new electrical substation, known as the Fogarty substation. The project also includes potential reconductoring and consideration of an existing transmission-line corridor at the Elsinore substation for possible future upgrades.

The study areas are located in the Terra Cotta area and within and adjacent to the City of Lake Elsinore. The Fogarty substation study area includes a total of 107 acres in 14 alternate locations in the Terra Cotta area. The Fogarty substation parcels are located in Sections 25, 26, and 27, T. 5 S., R. 5 W., San Bernardino Base and Meridian (SBBM), as shown on the U.S. Geological survey (USGS) Alberhill and Lake Elsinore 7.5-minute topographic quadrangles.

The 2.6-acre parcel proposed for reconductoring uses is located west of Spring Street between Flint Street on the north and Pottery Street on the south in Lake Elsinore, which is situated within the unsectioned Rancho Las Laguna. The project area is directly across Spring Street from the existing Elsinore substation. The proposed transmission-line upgrade corridor extends east-southeast along Flint Street, north along East Hill Street and across (under) Interstate 15, and then northwest along the frontage road, Camino del Norte, for a total distance of 2,118 m, or approximately 1.3 miles, as shown on the USGS Lake Elsinore 7.5-minute topographic quadrangle.

The study resulted in the identification of four cultural resources in the Fogarty substation study area. One historical resource, P33-7208, is a Colonial Revival house dating to 1902 and associated with the founding of the townsite of Lucerne in 1887. Two historical archaeological sites are CA-RIV-3832H, an abandoned railroad grade originally constructed by the Atchison, Topeka & Santa Fe Railway in 1896 and taken out of service in the early 1980s, and CA-RIV-5784H, a foundation and associated features from a house dated to 1924. The fourth identified resource, recorded as Iso-1, is a single, isolated unifacial granitic mano. No cultural resources were identified in the survey of the reconductoring parcel or in the transmission line corridor.

We request a review of your Sacred Lands Inventory for areas within and adjacent to the project site, as well as your recommendations for Native American tribes, groups, and individuals that should be consulted for the project. We look forward to hearing from you at your earliest convenience by fax at (530) 662-5500 or by e-mail ([m1erch@srircm.com](mailto:m1erch@srircm.com)). If you would like further information, please feel free to give me a call at (530) 661-1400. Thank you very much for your assistance.

Sincerely,

Michael K. Lerch  
Principal Investigator

CALIFORNIA  
Woodland  
194 W. Main St.  
Suite 200  
Woodland, CA  
95695  
(530) 661-1400  
(530) 662-5500 (fax)

Redlands  
21 W. Stuart Ave.  
P.O. Box 390  
Redlands, CA  
92373-0123  
(909) 335-1896  
(909) 335-0808 (fax)

ARIZONA  
Phoenix  
P.O. Box 27748  
Tempe, AZ  
85285-2681  
(480) 774-1920  
(480) 600-8692 (cell)

Tucson  
6099 E. Speedway Blvd.  
P.O. Box 31865  
Tucson, AZ  
85751-1865  
(520) 721-4309  
(520) 298-7044 (fax)

NEW MEXICO  
Albuquerque  
4425 Juan Tabo Blvd. NE  
Suite 100-B  
P.O. Box 14700  
Albuquerque, NM  
87191-4700  
(505) 323-8300  
(505) 323-8314 (fax)  
(505) 331-0880 (cell)

PACIFIC NORTHWEST  
Burnaby, British Columbia  
5331 Meade Dale Dr.  
Burnaby, British Columbia  
Canada V5B 2E6  
(604) 298-2701  
(604) 298-2701 (fax)

[www.srircm.com](http://www.srircm.com)

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL HALL, ROOM 204

SACRAMENTO, CA 95834

(916) 653-6251

Fax (916) 657-6390

Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)e-mail: [dn\\_nahc@pacbell.net](mailto:dn_nahc@pacbell.net)

September 27, 2006

Mr. Michael K. Lerch

**STATISTICAL RESEARCH, INC.**

194 West Main Street, Suite 200

Woodland, CA 95695

Sent by FAX to: 530-862-5500

Number of pages: 4

Re: Cultural Resource Identification Study/Sacred Lands File Search for Proposed Fogarty Substation, Southern California Edison, Riverside County, California

Dear Mr. Lerch:

The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area. The SLF failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not guarantee the absence of cultural resources in any 'area of potential effect (APE).'

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed is the name of the nearest tribes that may have knowledge of cultural resources in the project area. A list of Native American contacts is attached to assist you. The Commission makes no recommendation of a single individual or group over another. It is advisable to contact the person listed; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area.

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 15064.5(f) and Section 15097.98 and Health & Safety Code Section 7050.6 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton, Program Analyst

Attachment: Native American Contact List

**Native American Contacts  
Riverside County  
September 27, 2006, 2006**

**Pala Band of Mission Indians**

**Robert Smith, Chairperson**

12196 Pala Mission Rd.; PMB 50

Pala, CA 92059

Luiseno

Cupeno

(760) 742-3784

(760) 742-1411 Fax

**Pechanga Band of Mission Indians**

**Paul Macarro, Cultural Resource Center**

P.O. Box 1477

Luiseno

Temecula, CA 92593

(951) 308-9295

(951) 676-2768

(951) 695-1778 Fax

**Soboba Band of Mission Indians**

**Robert J. Salgado, Sr., Chairperson**

P.O. Box 487

Luiseno

San Jacinto, CA 92581

luiseno@soboba-nsn.

(951) 654-2765

(951) 654-4198 - Fax

**Cupa Cultural Center (Pala Band)**

**Shasta Gaughen, Assistant Director**

35008 Pala-Temecula Rd. PMB Box 445

Luiseno

Pala, CA 92059

cupa@palatribe.com

(760) 742-1590

**Pechanga Band of Mission Indians**

**Mark Macarro, Chairperson**

P.O. Box 2183

Luiseno

Temecula, CA 92593

(951) 676-2768

(951) 695-1778 Fax

**Willie Pink**

626 E. Old Second St.

Luiseno

San Jacinto, CA 92583

wjpink@hotmail.com

(909) 936-1216

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Fogarty Substation of Southern California Edison Company, a public utility, located in the Lake Elsinore area of Riverside County, California for which a Sacred Lands File search was requested.

**Native American Contacts  
Riverside County  
September 27, 2006, 2006**

**Soboba Band of Luiseno Indians**

**Harold Arres, Cultural Resources Manager**

**P.O. Box 487 Luiseno**

**San Jacinto CA 92581**

**harres@soboba-nsn.**

**(951) 654-2765**

**FAX: (951) 654-4198**

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.96 of the Public Resources Code.**

**This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Fogarty Substation of Southern California Edison Company, a public utility, located in the Lake Elsinore area of Riverside County, California for which a Sacred Lands File search was requested.**

January 12, 2007

Robert Brady  
City Manager  
City of Lake Elsinore  
130 South Main Street  
Lake Elsinore, CA 92530

SUBJECT: Notice of Proposed Construction  
Fogarty Substation

Dear Mr. Brady:

Pursuant to the California Public Utilities Commission (CPUC) General Order 131-D, Southern California Edison Company (SCE) is required to notify the City of Lake Elsinore and obtain a brief position statement from the City in regard to certain proposed projects involving 50kV - 200kV facilities.

SCE proposes to construct a new 115/12 kilovolt (kV) distribution substation, approximately 200 feet of 115 kV power lines, and six 12 kV distribution power lines in an area generally bounded by: east of Terra Cotta Road, west of Dobler Street, south of Kings Highway, and north of Hoff Avenue. The proposed electrical facilities will serve the projected need for electricity and maintain reliability in the southwestern area of Riverside County, adjacent to Alberhill Ranch and Lakeside Palms residential developments in the City of Lake Elsinore. A map of the proposed project is attached for your reference.

Please provide me with a brief position statement with regard to this proposed project. The City's statement will be included with SCE's Permit to Construct Application to the CPUC for this project. I would appreciate receiving your response by January 15, 2007. You may fax it to me at 951-820-5616.

If you have any questions or require additional information, please do not hesitate to call me at 951-928-8208.

Sincerely,



Louis B. Davis  
Region Manager

:lbd

Enclosure

26100 Menifee Road  
Romoland, CA 92585  
951-928-8208  
Fax 951-928-8308  
louis.davis@sce.com

bcc: D. Lowerison  
B. Santacruz  
L. Delgado



February 22, 2007

Mr. Louis Davis  
Southern California Edison (SCE)  
Public Affairs  
26100 Menefee Road  
Romoland, CA 92585

RE: Proposed Construction of Fogarty Substation

Dear Mr. Davis:

ROBERT E. MAGEE  
MAYOR

DARYL HICKMAN  
MAYOR PRO TEM

THOMAS BUCKLEY  
COUNCILMEMBER

GENIE KELLEY  
COUNCILMEMBER

ROBERT SCHIFFNER  
COUNCILMEMBER

ROBERT A. BRADY  
CITY MANAGER

951.674.3124  
130 S. MAIN STREET

LAKE ELSINORE, CA 92530

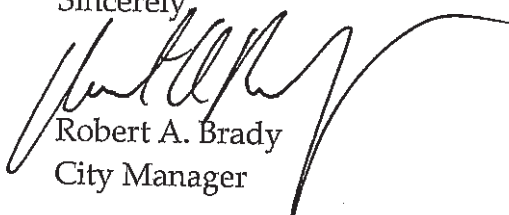
WWW.LAKE-ELSINORE.ORG

The City of Lake Elsinore would like to confirm that we have been briefed on your proposed Fogarty Substation Project. It is our understanding that SCE intends to file an application for this project in 2007 with the California Public Utilities Commission, with the intent, upon approval, to begin project implementation in 2008.

The City of Lake Elsinore supports improving electrical service and capacity to our area. As previously stated to Southern California Edison representatives, the City is concerned about the design and aesthetics of this facility. The City has requested that the facility be screened with a block wall and landscaping. The City would also like to have power lines placed underground whenever possible.

I ask that you keep this office informed of the status of the project throughout the filing process. As updates and/or issues arise that may impact Lake Elsinore, please be sure to notify me.

Sincerely,



Robert A. Brady  
City Manager

c. Mayor and City Council



# **APPENDIX F: CONSTRUCTION EMISSIONS CALCULATIONS**



## **APPENDIX F**

### **Construction Emissions Calculations**

<b>Construction Emissions (lb/day)</b>						
<b><u>Grading:</u></b>	<b>Construction Activity Emissions</b>					
	<b><u>Hours/Miles</u></b>	<b><u>CO</u></b>	<b><u>NOx</u></b>	<b><u>PM-10</u></b>	<b><u>SOx</u></b>	<b><u>ROG</u></b>
<b>Loader</b>	8	3.4	8.9	0.5	1.8	0.8
<b>Scraper</b>	8	6.5	22.7	0.9	4.0	1.7
<b>Compactor</b>	8	4.5	11.0	0.5	1.8	0.9
<b>Trucks (2)</b>	100	1.7	2.5	0.1	0.0	0.3
<b>Total</b>		<b>16.1</b>	<b>45.1</b>	<b>2.0</b>	<b>7.6</b>	<b>3.7</b>

<b>Construction Emissions (lb/day)</b>						
<b><u>Civil/Foundations:</u></b>	<b>Construction Activity Emissions</b>					
	<b><u>Hours/Miles</u></b>	<b><u>CO</u></b>	<b><u>NOx</u></b>	<b><u>PM-10</u></b>	<b><u>SOx</u></b>	<b><u>ROG</u></b>
<b>Bobcat</b>	8	2.9	4.8	0.4	1.0	0.7
<b>Loader</b>	6	2.6	6.7	0.4	1.3	0.6
<b>Forklift</b>	4	1.0	1.8	0.2	0.0	0.3
<b>Drill Rig</b>	8	3.8	10.0	0.4	2.6	0.5
<b>Trucks (5)</b>	250	4.4	6.2	0.1	0.0	0.7
<b>Total</b>		<b>14.7</b>	<b>29.5</b>	<b>1.5</b>	<b>4.9</b>	<b>2.8</b>

<b>Construction Emissions (lb/day)</b>						
<b><u>Transformer Installation:</u></b>	<b>Construction Activity Emissions</b>					
	<b><u>Hours/Miles</u></b>	<b><u>CO</u></b>	<b><u>NOx</u></b>	<b><u>PM-10</u></b>	<b><u>SOx</u></b>	<b><u>ROG</u></b>
<b>Crane</b>	6	2.1	6.1	0.3	1.2	0.5
<b>Forklift</b>	6	1.6	2.7	0.3	0.0	0.5
<b>Trucks (3)</b>	150	2.6	3.7	0.1	0.0	0.4
<b>Total</b>		<b>6.3</b>	<b>12.5</b>	<b>0.7</b>	<b>1.2</b>	<b>1.4</b>

<b>Construction Emissions (lb/day)</b>						
<b><u>Site Paving:</u></b>	<b>Construction Activity Emissions</b>					
	<b><u>Hours/Miles</u></b>	<b><u>CO</u></b>	<b><u>NOx</u></b>	<b><u>PM-10</u></b>	<b><u>SOx</u></b>	<b><u>ROG</u></b>
<b>Paving Machine</b>	8	3.3	7.3	0.5	1.2	0.9
<b>Loaders (2)</b>	12	5.1	13.3	0.8	2.7	1.2
<b>Trucks (3)</b>	150	2.6	3.7	0.1	0.0	0.4
<b>Bobcat</b>	8	2.9	4.8	0.4	1.0	0.7
<b>Total</b>		<b>13.9</b>	<b>29.1</b>	<b>1.8</b>	<b>4.9</b>	<b>3.2</b>

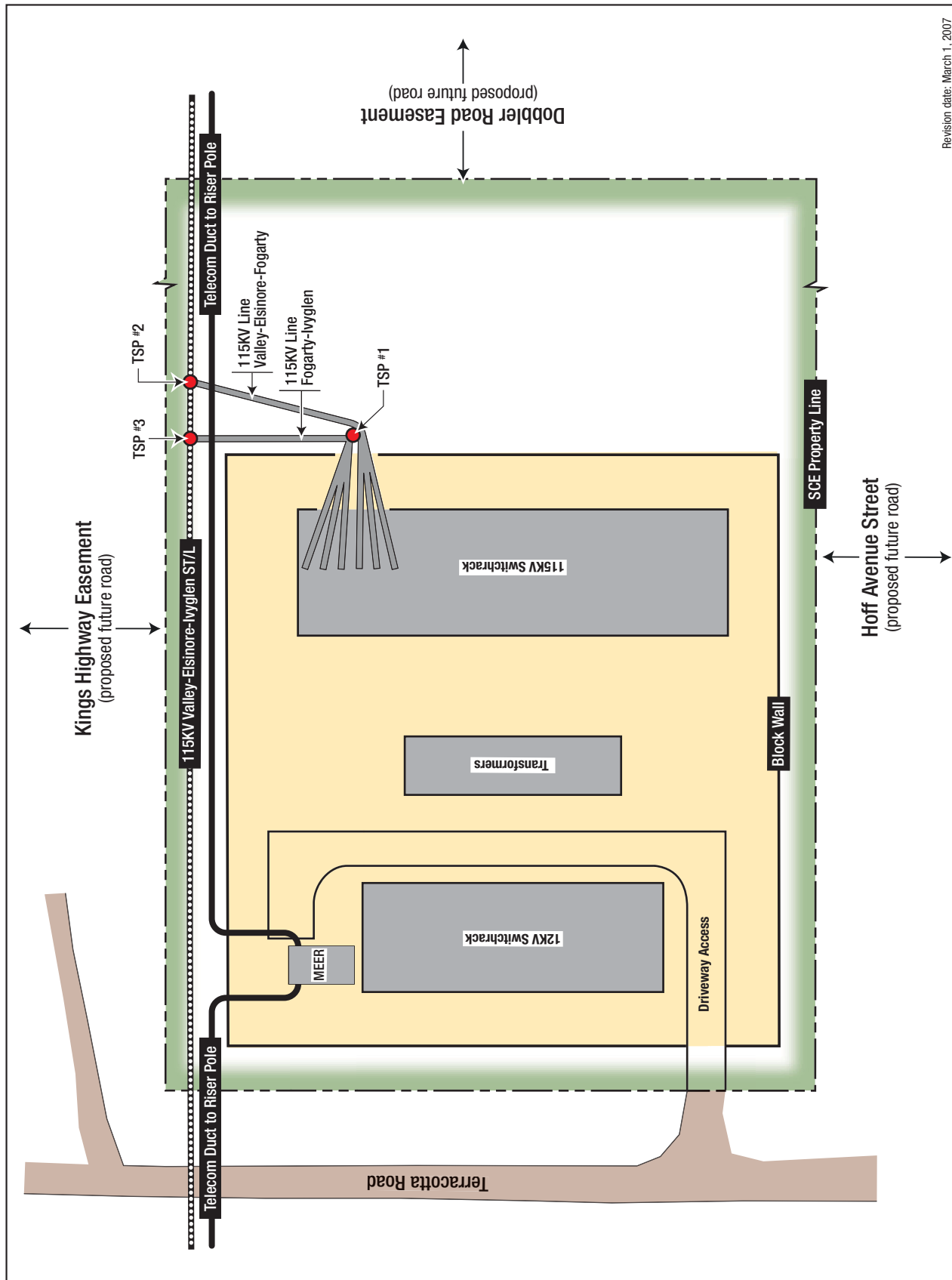
## APPENDIX F – CONSTRUCTION EMISSIONS CALCULATIONS

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Construction Emissions (lb/day)						
<u>Electrical:</u>	Construction Activity Emissions					
	<u>Hours/Miles</u>	<u>CO</u>	<u>NOx</u>	<u>PM-10</u>	<u>SOx</u>	<u>ROG</u>
Manlifts (2)	16	1.6	3.0	0.2	0.4	0.3
Forklift	6	1.6	2.7	0.3	0.0	0.5
Trucks (7)	350	6.1	8.7	0.2	0.0	0.9
Total		9.3	14.4	0.7	0.4	1.7

**APPENDIX G:  
TELECOMMUNICATIONS  
LINE  
ARRANGEMENT  
FOR THE  
PROPOSED  
PROJECT**





Source: Southern California Edison, 2006

Revision date: March 1, 2007

# Telecommunications Line Arrangement for the Proposed Project





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# **APPENDIX H: APPLICANT PROPOSED MEASURES AND MITIGATION MEASURES**



## **APPENDIX H**

### **Applicant Proposed Measures and Mitigation Measures**

The following measures have been incorporated into the Proposed Project by SCE.

#### **Aesthetics and Visual Resources**

- AES-SCE-1:** To reduce the potential for reflection of sunlight from the proposed poles, reduce color contrasts, and visually unify the Project with the surrounding characteristic landscape, SCE would:
- Use only non-specular conductors
  - Use tubular steel poles for the Proposed Subtransmission Line that will weather to be non-reflective
- AES-SCE-2:** To reduce the contrast and presence of the Proposed Subtransmission Line, SCE will order galvanized TSPs with a flat finish.

#### **Air Quality**

- AIR-SCE-1:** All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- AIR-SCE-2:** All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- AIR-SCE-3:** When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- AIR-SCE-4:** Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- AIR-SCE-5:** Use of clean-burning, on-road and off-road diesel engines. Where feasible, heavy-duty diesel powered construction equipment manufactured after 1996 (with Federally mandated “clean” diesel engines) would be utilized.
- AIR-SCE-6:** All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

## **APPENDIX H – APPLICANT PROPOSED MEASURES AND MITIGATION MEASURES**

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- AIR-SCE-7:** Construction workers would carpool when possible.
- AIR-SCE-8:** Vehicle idling time would be minimized.
- AIR-SCE-9:** Limit traffic speeds on unpaved roads to 15 mph.
- AIR-SCE-10:** CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.
- AIR-SCE-11:** All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program is considered to comply with this measure.
- AIR-SCE-12:** All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.

### **Biological Resources**

- BIO-SCE-1:** A qualified biologist will conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of applicable environmental regulations, the need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project Site boundaries within which the Project activities must be accomplished.

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## APPENDIX H – APPLICANT PROPOSED MEASURES AND MITIGATION MEASURES

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- BIO-SCE-2:** Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
- BIO-SCE-3:** The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
- BIO-SCE-4:** Projects should be designed to avoid the placement of equipment and personnel within stream channels or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
- BIO-SCE-5:** Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season special-status avian species if found to be present.
- BIO-SCE-6:** Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- BIO-SCE-7:** Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- BIO-SCE-8:** A qualified biologist shall monitor grading and soil movement activities for the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.
- BIO-SCE-9:** The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- BIO-SCE-10:** Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the Proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall be specified in the construction plans. Construction limits will be

## APPENDIX H – APPLICANT PROPOSED MEASURES AND MITIGATION MEASURES

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fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

- BIO-SCE-11:** The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.
- BIO-SCE-12:** All subtransmission poles would be designed to be raptor-safe in accordance with the Suggested Practices for Raptors on Power Lines: State of the Art in 1996 (Avian Power Line Interaction Committee 1996).
- BIO-SCE-13:** Prior to installation of the poles, a survey would be conducted to locate any raptor or raven nests occurring on the existing poles. If nests are found on poles planned for replacement or modification, SCE would suspend work until the nests are inactive.
- BIO-SCE-14:** Construction work plans/schedules will be designed to minimize construction-related noise in sensitive areas when feasible. In addition, all construction equipment will maintain functional exhaust/muffler systems and idling of motors, except as necessary (e.g., concrete mixing trucks), shall be limited.

### Cultural Resources

- CULT-SCE-1** If previously unidentified archaeological resources are unearthed during construction activities, construction would be halted in that area and directed away from the discovery until a qualified archaeologist assesses the significance of the resource. The archaeologist would recommend appropriate measures to record, preserve or recover the resources.
- CULT-SCE-2** If human remains are encountered during construction or any other phase of development, work in the area of the discovery must be halted in that area and directed away from the discovery. 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 Native American Heritage Commission (NAHC) would be notified within 24 hours as required by Public Resources Code 5097. The 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 treatment of remains.



### **Geology and Soils**

- GEO-SCE-1:** SCE seismic design specifications for the construction of SCE substations would be based on criteria presented by the Institute of Electrical and Electronics Engineers provisions set forth in its “Recommended Practices for Seismic Design of Substations.” However, the foundations shall be designed in compliance with CBC-2001, UBC-1997 and anchorage loads as provided by equipment manufacturers, whichever is more severe.
- GEO-SCE-2:** Prior to final grading plans and design of substation equipment foundations, a geotechnical and engineering geology study would be performed to identify site-specific soil and geologic conditions in enough detail to support final engineering and the requirements of reviewing agencies. Recommendations from the geotechnical and engineering geology study would be incorporated into the final project design.
- GEO-SCE-3:** Substation improvements and construction activities would be performed in accordance with the soil erosion and sediment containment measures specified in the Construction SWPPP. Implementation of the SWPPP would help stabilize graded areas and waterways, and reduce erosion and sedimentation. The construction SWPPP would identify BMPs to be implemented during construction activities. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. SCE would obtain a grading permit.

### **Hazards and Hazardous Materials**

- HAZ-SCE-1:** SCE would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) prior to initiating construction activities. The SWPPP would utilize BMPs to address the storage and handling of hazardous materials during construction activities.
- HAZ-SCE-2:** SCE would implement standard fire prevention and response measures. The standards address spark arresters, smoking and fire rules, storage and parking areas, use of gasoline-powered tools, road closures, use of a fireguard, fire suppression tools, fire suppression equipment, and training requirements. Portable communication devices (i.e. radio or mobile telephones) would be available to construction personnel.
- HAZ-SCE-3:** SCE would prepare and implement a Spill Prevention, Control and Countermeasure plan (SPCC) prior to transporting any oil containing equipment to the site.

### **Hydrology and Water Quality**

**HYDRO-SCE-1:** A SWPPP (for Construction and Operations) would be submitted to Riverside County along with grading permit applications. Implementation of the Plan would help stabilize graded areas and water courses, and reduce erosion and sedimentation. The plan would designate BMPs that would be adhered to during construction activities. Erosion-minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) would be installed before clearing and grading began. Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities. During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials would be stored, where trash would be in-place, where rolling equipment would be parked, fueled, and serviced, and where construction materials such as reinforcing bars and structural steel members would be stored. Erosion control during grading of the construction sites and during subsequent construction would be in-place and monitored as specified by the Construction SWPPP. A silting basin(s) would be established, as necessary, to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.

**HYDRO-SCE- 2:** An environmental training program would be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures, and Construction SWPPP measures, to all field personnel. A formal monitoring program would be implemented to ensure that the plans are followed throughout the construction period.

**HYDRO-SCE-3:** The Construction SWPPP would include procedures for quick and safe cleanup of accidental spills. This plan would be submitted with the grading permit application. The Construction SWPPP 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.

### **Noise**

**NOISE-SCE-1:** All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 7:00 a.m. to 7:00 p.m. and prohibited on Sundays and all legally proclaimed holidays.

- NOISE-SCE-2:** Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- NOISE-SCE-3:** Construction traffic shall be routed away from residences and schools, where feasible.
- NOISE-SCE-4:** Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A “common sense” approach to vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.)

#### **Transportation and Traffic**

- TRANS-SCE-1:** SCE shall consult with Caltrans, the County of Riverside Transportation Department, and the City of Lake Elsinore, to schedule construction activities that may affect traffic.
- TRANS-SCE-2:** If lane closures are required, SCE would comply with best management practices established by the Work Area Protection and Traffic Control Manual (California Joint Utility Control Committee 1996). These measures might include the use of cones, flagmen, detours, or performance of construction at night if work requires equipment or personnel operation within the road right-of-way.
- TRANS-SCE-3:** SCE would limit the number of trips required by encouraging carpooling.
- TRANS-SCE-4:** Trucks would use designated truck routes whenever possible.
- TRANS-SCE-5:** SCE would encourage parking in areas that would not have adverse impacts to existing parking availability.

The following are Mitigation Measures for the Proposed Project.

#### **Biological Resources**

- BIO – 1**            The limits of the long-spined spineflower population will be flagged or otherwise marked to ensure construction crews will avoid direct or indirect

## APPENDIX H – APPLICANT PROPOSED MEASURES AND MITIGATION MEASURES

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impacts to the population. Construction personnel shall be instructed to avoid intrusion beyond these marked areas.

The known locations of special-status plant populations that might be found prior to or during the construction period will be monitored, using a trained professional botanist. Monitoring will occur during ground disturbing construction activity in the vicinity of the special-status plant populations to assure the effectiveness of protection measures.

If impacts to the known location of the long-spined spineflower are unavoidable, seeds will be collected and the topsoil may be salvaged and stockpiled in identified upland work areas. After construction is complete, the salvaged topsoil will be spread over the disturbed area of the original population. Once the salvaged topsoil has been spread the seeds of the long-spined spineflower collected prior to construction will be spread throughout the original population location. Seeds will be collected during June prior to construction once the spineflower has senesced.

### BIO – 2

If breeding burrowing owls are found during the pre-construction surveys, the burrows will be flagged and an appropriate construction buffer will be established to avoid direct and indirect impacts to active nests. If the appropriate buffer can not be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, the California Department of Fish and Game will be contacted by the SCE biologist to determine relocation protocols and additional mitigation requirements.

### BIO – 3

**Erosion Control:** The BMPs included in the SWPPP will be implemented during construction to minimize impacts associated with erosion. BMPs will include the installation of sediment and erosion control structures to protect biological resources, including streams, as well as roadways and adjacent properties. Watering for dust control during construction will also be employed.

### BIO – 4

**Reducing hydrologic impacts:** Potential hydrologic impacts would be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water.

### BIO – 5

**Noise Control:** If nesting birds protected under federal or state regulations are located within the Project Area, then noise attenuation measures shall be implemented to prevent construction or operational

noise from exceeding ambient levels during the nesting period. SCE shall minimize noise through careful work scheduling and having properly functioning mufflers on construction vehicles. In addition, to the extent practicable, no Project vehicles, chain saws, or heavy equipment will be operated within the exclusion zone until the nesting season is over or a qualified biologist has determined that nesting is finished and the young have fledged. If it is not practicable to avoid work within an exclusion zone around an active nest, work activities modified to minimize disturbance of nesting birds may proceed within these zones. If the biologist determines that particular activities pose a high risk of disturbing an active nest, the biologist will recommend additional, feasible measures to minimize the risk of nest disturbance. If work activities are found to result in harm to nesting birds, destruction of an active nest, or nest abandonment prior to fledging, the biologist will report this to the CDFG and USFWS.

**BIO – 6**

**Pre-Construction Nesting Bird Surveys:** To avoid the potential abandonment or removing active nests (with eggs or young) of any special status or non-special-status migratory birds and raptors, SCE will implement one of the following:

- Conduct all construction activity (including vegetation pruning or removal) during the non-breeding season (generally between August 16 and February 28) for most special-status and non-special-status migratory birds
- If construction activities are scheduled to occur during the breeding season (generally between March 1 and August 15), a qualified wildlife biologist will conduct pre-construction focused nesting surveys prior to any ground disturbing activity, tree trimming or vegetation removal activities

**BIO – 7**

**Long-Term Maintenance of Spineflower Habitat:** Potential operation impacts to the location and population of long-spined spineflower have been identified as vehicle trespass, vegetation clearance or herbicide application, and conflicts with future landscape plans. The following elements will be implemented to reduce impacts to the long-spined spineflower population:

- Protection from vehicular trespass for the population
- Restrictions upon, or conditions under which vegetation clearance or herbicide application could occur
- Integration with future landscape plans for the facility

**Cultural Resources**

- CULT-1** Paleontological monitoring shall occur while conducting any ground disturbing activities, including but not limited to grading, trenching, and tunneling, on the Project Site. The paleontological monitor shall have the authority to halt any activities adversely impacting potentially significant resources, and said resources must be recovered, analyzed, and curated with an appropriate repository.

# **APPENDIX I: PERMIT AND REVIEW REQUIREMENTS**





## Fogarty Substation Preliminary Project Permit Assessment

Agency	Jurisdiction	Application
<b>California State Agencies</b>		
California Public Utilities Commission (CPUC)	Transmission, Substation, Generation Projects 50 kV and above	General Order 131-D <ul style="list-style-type: none"> <li>Proponents Environmental Assessment (PEA)</li> <li>Permit to Construct (PTC)</li> </ul>
California Department of Fish and Game (CDFG)	Manage fish, wildlife, plant resources and habitats	Request to Extend Stream/Lake Alteration 1601 Agreement (impacts to streambeds and banks). Consultation with agency to determine appropriate mitigation measures – Notification number issued
California Department of Transportation (Caltrans)	Work on highways, state owned roads & bridges for other than normal transportation purposes	Encroachment or Crossing Permit and traffic plan if construction is on or near State owned roads and rights-of way
Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES) permit for storm water runoff associated with construction and operation activity	Submittal of Notice of Intent (NOI) to Regional Board and preparation of a Construction and/or Operations Storm Water Pollution Prevention Plan (SWPPP)
State Historic Preservation Office (SHPO)	Any archeological or paleontological work	May need a Cultural Resource Use Permit, Field Use Authorization, and an ARPA permit
<b>Federal Agencies</b>		
Environmental Protection Agency (USEPA)	Controls emission standards for mobile sources	Comply with pollution standards for cars, trucks, and construction equipment

**APPENDIX I – PERMIT AND REVIEW REQUIREMENTS**

<b>Agency</b>	<b>Jurisdiction</b>	<b>Application</b>
US Fish and Wildlife Service (USFWS)	Threatened or endangered species	Consultation with agency to determine appropriate mitigation measures
Federal Aviation Administration (FAA)	Obstructions or hazards to air navigation	Review FAA requirements for everything above ground, near airports, heliports, and reconfiguration of existing facilities
<b>Local and Regional Agencies</b>		
Air Quality Management District(s)	Responsible for controlling emissions primarily from stationary sources of air pollution	<ul style="list-style-type: none"><li>▪ Best management practices for construction (no permit required)</li><li>▪ Permits for asbestos, soil decontamination, VOC Rule 1166</li><li>▪ Permit for internal combustion engines</li></ul>
Certified Unified Program Agency (CUPA)  (Name of CUPA depends on location)	Hazardous Materials Business Plan	Location, types, and volumes (inventory) of hazardous materials at a substation
Riverside Regional Conservation Authority	Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)	Required if SCE has to get a discretionary permit within western Riverside County
City	Fire Protection Review and Approval	Required per individual city standards
City	Grading Permit	Required per individual city standards
City	Encroachment Permit (railroad, road crossings, etc.)	Required per individual city standards

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**APPENDIX I – PERMIT AND REVIEW REQUIREMENTS**

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<b>Agency</b>	<b>Jurisdiction</b>	<b>Application</b>
City	Building and Safety	Contractor to obtain a city business license as required
City	Noise Survey	Required per individual city standards
City	Traffic Plan	Required per individual city standards
City	Road Closure	Required per individual city standards (Cranes, deliveries, etc.)
City	Excavation Permit	Required per individual city standards
County (various)	Grading Permit	Required per individual county standards
County (various)	Public Works Traffic Plans	Required per individual county standards
County (various)	Flood Control Districts	Permits and easements for crossing County Flood Control District lands
County	Encroachment Permit (railroad, road crossings, etc.)	Required per individual city standards

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