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: Valley South Subtransmission Project	)	Application No._____

PROPONENT'S ENVIRONMENTAL ASSESSMENT: VALLEY SOUTH 115 kV SUBTRANSMISSION PROJECT

VOLUME 3 of 4

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Acronyms and Abbreviations

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
A.D.	anno domini
A-1	Light Agriculture
AB	Assembly Bill
ACSR	aluminum conductor steel reinforced
ADT	average daily traffic
AGL	above ground level
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
AP	Alquist-Priolo
A-P	Light Agriculture with Poultry
APLIC	Avian Power Line Interaction Committee
APM	Applicant Proposed Measures
AQMP	Air Quality Management Plan
Aspen	Aspen Environmental Group
B.P.	before present
BBI	Bloom Biological Inc.
BGEPA	Bald and Golden Eagle Protection Act
Bgs	below ground surface
BMP	best management practice
BRA	Biological Resources Assessment
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupation and Safety Health Administration
Caltrans	California Department of Transportation
CAPS	Criteria Area Plant Species

CARB	California Air Resources Board
CCR	California Code of Regulations
CDC	California Department of Conservation
CDF	State of California, Department of Finance
CDFW	California Department of Fish and Wildlife (formerly called the California Department of Fish and Game)
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Statewide Construction General Permit
CGS	California Geological Survey
CH_4	methane
CIWMP	Countywide Integrated Waste Management Plan
CJUTCM	California Joint Utility Traffic Control Manual
CMP	Congestion Management Program
CMS	Congestion Management System
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
COMM	Communications
CPRC	California Public Resources Code
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSSC	California Species of Special Concern
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels

DBESP	Determination of Biological Equivalent or Superior Preservation
DHS	United States Department of Homeland Security
DOGGR	Department of Conservation/Division of Oil, Gas, and Geothermal Resources
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DWQ	Division of Water Quality
DWR	Department of Water Resources
ECC	Emergency Command Center
EDR	Environmental Data Resources, Inc.
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
ENA	Electrical Needs Area
EOP	Emergency Operations Plan
EPRI	Electric Power Research Institute
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FRC	fault return conductor
FTA	Federal Transit Administration
G.O.	General Order
GBN	ground-borne noise
GBV	ground-borne vibration
GHG	greenhouse gas
GIS	geographical information system
GPS	global positioning system
GWP	global warming potential
HCP	Habitat Conservation Plan
HOV	high-occupancy vehicle
HP	horsepower

HSWA	Hazardous and Solid Waste Act
Hz	Hertz
I	Interstate
I-15	Interstate 15
I-215	Interstate 215
IOU	investor-owned public utility
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Watershed Management Plan
Kcmil	thousand circular mil
Kdvg, Kgb, Kpvg, Kpvt	Cretaceous-aged igneous rocks
Kgb	Cretaceous-aged gabbro
KOP	Key Observation Point
kV	kilovolt
LACM	Natural History Museum of Los Angeles County
lbs/day	pounds per day
LDL	Larson Davis Laboratories
L_{dn}	day-night average noise level
L_{eq}	equivalent noise level
L_{max}	maximum noise level
L_{min}	minimum noise level
L_n	statistical descriptor
LOS	level of service
LST	localized significance threshold
LUP	Linear Underground/Overhead Projects
L_v, VdB	vibration velocity level
LWS	light weight steel
MBTA	Migratory Bird Treaty Act
MEER	Mechanical and Electrical Equipment Room
mg/L	milligrams per liter
Mgd	million gallons per day
micro in/sec	micro inch per second

MRZ	Mineral Resource Zones
MS4s	municipal separate storm sewer systems
MVA	mega volt-amperes
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NEPA	National Environmental Policy Act
NEPS	Narrow Endemic Plant Species
NFIP	National Flood Insurance Program
NIPP	National Infrastructure Protection Plan
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRA	Natural Resource Assessment
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OHGW	overhead ground wire
OHP	Office of Historic Preservation
OHWM	ordinary high water mark
OPGW	Optical Ground Wire
PCE	passenger car equivalent
PEA	Proponent's Environmental Assessment
PM_{10}	particulate matter smaller than 10 microns
$PM_{2.5}$	particles (particulates) smaller than 2.5 microns diameter
Ppm	parts per million
PPV	peak particle velocity

PRC	Public Resources Code
PRSM	Paleontological Resources Sensitivity Map
PSE	Participating Special Entity
PUHSD	Perris Union High School District
PVC	polyvinyl chloride
Qof	Quaternary older fan
Qps	Pauba Formation
Qvoa	Quaternary very old alluvium
Qvof	Quaternary very old fan
Qya	Quaternary younger alluvium
Qyf	Quaternary younger fan
Qyv	Quaternary younger valley deposits
RCA	Regional Conservation Authority
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCIP	Riverside County Integrated Project
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RCWD	Rancho California Water District
RHNA	Regional Housing Needs Assessment
RMS	root mean square
ROW	right-of-way
ROW	right-of-way
RoWD	Report of Waste Discharge
R-R	Rural Residential
RTA	Riverside Transit Agency
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S_a	spectral acceleration

SAC	stranded aluminum conductor
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SBCM	San Bernardino County Museum
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SDRWQCB	San Diego Regional Water Quality Control Board
SF6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SMGB	State Mineral and Geology Board
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SOI	Sphere of Influence
SO_X	sulfur oxides
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
ssp.	subspecies
SWAT	Special Weapons and Tactics
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plans
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCR	transportation concept reports
TDM	Transportation Demand Management
TDS	total dissolved solid
TMDL	total maximum daily load
TPA	Temporary Ponded Area
TPZ	timberland preserve zone
TRC	TRC Solutions Incorporated
Trmq and Trmu	Triassic-aged metamorphic rocks

TSCA	Toxic Substances Control Act of 1976
TSP	tubular steel pole
U.S.C.	United States Code
UBC	Uniform Building Code
USA	Underground Service Alert
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WEAP	Worker Environmental Awareness Program
Winchester MAC	Winchester Municipal Advisory Council
WRCMSHCP	Western Riverside County Multiple-Species Habitat Conservation Plan

Section 4.5
Cultural Resources

4.5 Cultural Resources

This section describes the cultural and paleontological resources in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project). Potential impacts to cultural resources (i.e., archaeological and historic-era resources) are discussed first, followed by a discussion of paleontological resources. The section analyzes the potential impacts on identified cultural and paleontological resources associated with construction and operation of the Proposed Project and Alternative Project.

4.5.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.5.1.1 Prehistory

The Proposed Project is located in inland southern California (see Figure 1.2 Electrical Needs Area), within the Southern Coast Archaeological Region near the boundary of the Desert Region (Moratto, 1984; Robinson, 2001). Evidence from the southern California coastal region documents human occupation for at least the last 10,000 years. Some researchers have proposed occupation more than 40,000 years ago (Carter, 1957; Moriarty and Minshall, 1972; Moriarty, 1987). However, solid evidence for such an early occupation remains scant. Beginning sometime circa 10,000 years ago, three major prehistoric time periods are commonly recognized: the Early Prehistoric Period, the Archaic Period, and the Late Prehistoric Period. During these periods, several occupation assemblages or cultural patterns have been defined for the southern coastal

and near coastal areas of southern California: the San Dieguito tradition/complex during the Early Prehistoric Period; the Milling Stone Horizon (Wallace, 1955) and Encinitas tradition (Warren, 1968) during the Archaic Period; and the Shoshonean and Yuman traditions (Warren, 1968) during the Late Prehistoric Period. These latter two traditions extended in time to Historic contact (Warren, 1968).

For the Colorado Desert, Schaefer (1994) has defined the prehistory in a sequence similar to that for the Southern Coast Region, with the Paleo-Indian Period followed by the Archaic Period (divided into Early and Late Archaic Periods) and then the Late Prehistoric Period. Schaefer also indicates that in the Colorado Desert area, little definitive evidence exists for prehistoric occupation before the beginning of the Late Archaic Period circa 4,000 years ago (Schaefer, 1994).

4.5.1.1.1 Early Prehistoric Period

During the Early Prehistoric Period, the Early Man Horizon/San Dieguito tradition/complex extended from circa 11,000 to circa 8,500 years ago. Elsewhere in California, this period is frequently characterized by the presence of artifacts, such as fluted projectile points, indicative of the presence of the Big Game Hunting tradition, and is labeled the Paleo-Indian Period. The Big Game Hunting tradition was associated with the hunting of the now extinct megafauna that were still in existence at the end of the Pleistocene in some areas of California. However, evidence characteristic of the Big Game Hunting tradition in the Proposed Project area is essentially absent. Although the San Dieguito tradition/complex also is often characterized as having a hunting subsistence emphasis, it does not contain the artifacts that are distinctive of the Big Game Hunting tradition. Some researchers interpret the San Dieguito tradition/complex as having a primarily, but not exclusively, hunting subsistence orientation, but being sufficiently hunting oriented as to be distinct from the more gathering-oriented complexes of traits that were to follow in the Archaic Period (Warren, 1968; Warren et al., 1998). Other researchers see the San Dieguito subsistence system as less focused on hunting and more diversified, and therefore, possibly ancestral to, or a developmental stage for the subsequent, predominantly gathering oriented, Encinitas tradition, denoted in the San Diego area as the "La Jolla/Pauma complex" (Bull, 1983; Ezell, 1987; Gallegos, 1985, 1987 and 1991; Koerper et al., 1991).

So far, little definite evidence for the San Dieguito complex has been discovered in the coastal and near coastal areas of southern California, north of San Diego County. In the Colorado Desert area, little archaeological evidence exists for prehistoric occupation during the Paleo-Indian and Early Archaic periods, and only limited evidence exists for the earliest part of the Late Archaic Period, circa 4,000 years ago (Schaefer, 1994). The general lack of Pleistocene and early Holocene lakes in the Colorado Desert area may account for a paucity of human presence during the Paleo-Indian Period.

4.5.1.1.2 Archaic Period

During the subsequent Archaic Period, artifact assemblages of the Milling Stone Horizon/Encinitas tradition occur at a range of coastal and adjacent inland sites, and in contrast to those of the previous Early Prehistoric Period, they are relatively common in the Proposed Project area and vicinity. These assemblages indicate that a relatively stable, sedentary,

predominantly gathering complex, possibly associated with one people, was present in the coastal and immediately inland areas of southern California for more than 7,000 years (Warren et al., 1998; Grenda, 1997). In the Proposed Project vicinity, archaeological investigations conducted in Perris Valley for the Perris Reservoir Project produced a single radiocarbon date of circa 2,200 years before present (B.P.) and a few diagnostic artifacts as the only evidence for an Archaic Period occupation at the sites investigated (Bettinger, 1974). More recently, large-scale archaeological investigations for the Eastside Reservoir Project (later known as the Diamond Valley Lake Project), located approximately 3.5 miles east of the Proposed Project area, have yielded a local chronology specific to the Domenigoni and Diamond Valleys based on projectile point style changes and associated radiocarbon dates (Robinson, 2001; Goldberg, 2001). The terminology in this chronology resembles that already presented above with the period from 9,500 to 7,000 years ago designated as the Early Archaic period, the period from 7,000 to 4,000 years ago designated as the Middle Archaic, and the period from 4,000 to 1,500 years ago designated as the Late Archaic. Additional investigations at Lake Elsinore, located approximately 13 miles to the west of the Proposed Project area, indicate occupation as early as 8,500 years ago (Grenda, 1997). Thus, prehistoric occupation during the Archaic Period, in areas of western Riverside County in the Proposed Project vicinity, is documented to have occurred, beginning possibly as early as 9,300 years ago, remaining present to the end of the period, approximately 1,500 years ago.

4.5.1.1.3 Late Prehistoric Period

The beginning of the Late Prehistoric Period, circa 1,500 years ago, is seen as time marked by a number of rather abrupt changes in subsistence practices and the adoption of significant new technologies, including: a shift from hunting using *atlatl* and dart to the bow and arrow; a de-emphasizing of shellfish gathering along some areas of the coast (possibly because of silting-in of the coastal lagoons); and an increase in the storage of crops, such as acorns and pinyon nuts, by both Shoshonean and Yuman peoples. Other new traits introduced during the Late Prehistoric Period include the production of pottery and cremation of the dead, and locally in the western Riverside County area, a shift in settlement pattern is apparent (Wilke, 1974).

This shift in settlement is first noted during the early part of the period, from 1,500 to 750 years ago, and is evidenced locally by a rather sudden decline in occupation during the initial part of the period. This period also can be seen to partially coincide with a warm and arid time span known as the Medieval Warm Period, documented to have occurred between approximately 1,100 and 600 years ago (Jones et al., 1999; Kennett and Kennett, 2000; Stine, 1994). Goldberg (2001) hypothesized that the Medieval Warm Period could account for the decline in sites occurring in the Eastside Reservoir Project area during the Saratoga Springs Period (1500 to 750 B.P.), claiming that desert and inland areas of western Riverside County, such as where the Eastside Reservoir Project and the Proposed Project area are located, would no longer have been suitable to support residential bases. Although a decline was noted during the initial part of the Saratoga Springs Period, subsequently, during the latter part of the period—the Medieval Warm Period—a reoccupation began to occur (Goldberg, 2001:578).

This also coincides with the onset of the Little Ice Age, generally dated from 750 to 150 B.P. (Goldberg, 2001; Sutton et al., 2007). During this period, the climate was cooler and moister, and sites identified within the region reflect a substantial increase in number and diversity, longer

occupation periods, and more sedentary land use. Similar intensification of land use also occurred during this time in neighboring San Gorgonio Pass (Bean et al., 1991) and Perris Valley (Wilke, 1974).

4.5.1.2 Ethnohistory

The Proposed Project area is adjacent to the San Jacinto and Perris Valleys, which most likely represented a transition zone between areas heavily occupied by the ethnographically recognized Cahuilla, Luiseño, and Gabrielino (Bean and Vane, 1979). The Cahuilla, Luiseño, Gabrielino, and Serrano are Takic-speaking people of the Uto-Aztecan linguistic stock (Bean and Vane, 1979; Miller, 1986). The Cahuilla and Luiseño are of the Cupan subgroup; the Gabrielino and Serrano are of the Serrano-Gabrielino subgroup (Miller, 1986). Kroeber and others have previously referred to these Takic-speaking people of the Uto-Aztecan linguistic stock as members of the Shoshonean language family (Kroeber, 1907, 1925). Although some dispute the use of this terminology (e.g., Miller, 1986), it is still commonly used to refer to these groups.

Speakers of the Uto-Aztecan language family occupied large portions of the Great Basin and vicinity, including a portion of southern California and an area stretching from southern Arizona and northwest and central Mexico into Nevada, Oregon, and Idaho (Miller, 1986). The expansion of the Takic-speaking group into southern California from a presumed Great Basin hearth land is unrefined, but several scholars have hypothesized as to when and how the so-called "Uto-Aztecan wedge" occurred. Sutton (2009) argues that the Takic-speaking group expanded into southern California from the San Joaquin Valley about 3,500 years ago. Moratto (1984) also proposes that Takic expansion into the Southern Coast region correlates to the end of the Early Period (Late Archaic), circa 3,200 to 3,500 years ago. However, Bean and Smith (1978) state that the Gabrielino did not expand into the Los Angeles Basin until 2,500 years ago, while Golla (2007) suggests an expansion of Uto-Aztecan speakers into southern California approximately 2,000 years ago, with the Cupan expansion occurring even later, around anno domini (A.D.) 900. Wilke (1978) suggests that Cahuilla occupied the general area around Lake Cahuilla from around A.D. 900. According to researchers for the Eastside Reservoir Project, the Saratoga Period (A.D. 500 to 1250) of the local chronology was a time of change and a period of new cultural adaptation (Robinson, 2001), perhaps representing the Cupan expansion into western Riverside County during this time period.

Although the exact chronology of Takic-speaking group's immigration to southern California remains uncertain, it is generally accepted that Native American population figures in the region substantially increased toward the end of the Late Prehistoric Period. Additionally, after A.D. 1600, a change occurred in settlement and subsistence patterns, and land use intensified in the San Gorgonio Pass, the San Jacinto Plain, and Perris Valley, which was reflected into the ethnohistoric period (Wilke, 1974 and 1978; Schaefer, 1994; Bean et al., 1991; Goldberg, 2001). Ethnographically, then, the Proposed Project area falls in the boundary zone of two Takic-speaking Native American groups—the Luiseño, extending to the southwest, and the Cahuilla, extending to the northeast.

4.5.1.2.1 Luiseño

The term Luiseño is derived from the Mission San Luis Rey, and since Spanish-Mexican colonial times, it has been used in reference to those Takic-speaking people associated with the mission. Luiseño territory has been ethnographically defined as some 1,500 square miles of southern California, including most of the drainage of the San Luis Rey River and that of the Santa Margarita River (Bean and Shipek, 1978), and extending along the coast from Agua Hedionda Creek on the south to Aliso Creek on the northwest. The northern territorial boundary has been described as extending inland to Santiago Peak, across to the eastern side of the Elsinore Fault Valley (Temescal Creek), southward to the east of Palomar Mountain, and around the southern slope above San Jose Valley. From there, the boundary purportedly turned west and returned to the sea along the Agua Hedionda Creek.

4.5.1.2.2 Cahuilla

Prehistorically, the Cahuilla territory was topographically diverse, occupying elevations from 11,000 feet in the San Bernardino Mountains to below sea level at the Salton Sea. The Cahuilla are thought to have been distinguished from other Shoshonean groups (the Luiseño, Serrano, and Gabrielino) in part by mountain ranges and plains, but they are known to have interacted regularly with these and other groups through trade, intermarriage, ritual, and war. Cahuilla villages commonly were situated within canyons extending into mountain ranges or on nearby alluvial fans, typically near sources of water and food. The diverse habitat of the Cahuilla enabled a wide variety of plant and animal species to be used for food, goods manufacture, and medicine (Bean, 1978).

4.5.1.3 Historical Background

4.5.1.3.1 Spanish Period

In 1769, a Spanish expedition headed by Gaspar de Portolá and Junípero Serra traveled north from San Diego. The aim of the expedition was to seek out locations for a chain of presidios and missions, to extend the Spanish Empire from Baja California into Alta California (Hudson, 1978). The first Spaniard to visit what is now Riverside County was Don Pedro Fages, the commander at the San Diego Presidio, in 1772. In the pursuit of deserted soldiers, Fages traveled from San Diego east to the desert in Imperial County, then northwest through the San Jacinto Mountains and the San Jacinto Valley towards Riverside (Lech, 2004). The first documented Spanish contact that inland southern California experienced was by Spanish military captain Juan Bautista de Anza, who led expeditions in 1774 and 1775 from Sonora to Monterey (Bolton 1930). Anza embarked on the 1774 expedition to explore a land route northward through California from Sonora and, on the 1775 expedition, to bring settlers across this land route to strengthen the colonization of San Francisco (Rolle, 1963).

Throughout the Spanish Period, the influence of the Spanish progressively spread further from the coast and into the inland areas of southern California as Missions San Luis Rey and San Gabriel extended their influence into the surrounding regions and used the lands for grazing cattle and other animals. In the late 1810s, ranchos and mission outposts, called *asistencias*, were established near the Proposed Project area, thereby increasing the amount of Spanish contact in

the region. An asistencia was established south of the Proposed Project area in Pala in 1818, and the San Bernardino Asistencia was established in 1819 on the San Bernardino Rancho, located north of the Proposed Project area. Additionally, Rancho San Jacinto was established for cattle grazing in the San Jacinto Valley (Bean and Vane, 1980; Brigandi, 1999).

4.5.1.3.2 Mexican Period

Following independence from Spain in 1821, the focus of the Mexican government turned from missionizing to settling California. To facilitate travel and communication, Mexican officials opened up several trails in the 1820s that ran through, or near, the Proposed Project area. What became known as the Cocomaricopa Trail, and later the Bradshaw Trail in the 1860s, was a mail route that ran from Tucson to San Gabriel through the San Gorgonio Pass (Lech, 2004). The route, following ancient Cahuilla and Maricopa trails that linked wells and springs located across the Colorado Desert, was named after Jose of the Cocomaricopa Indians who carried the mail. Another land route, the Sonora Trail, was opened to facilitate travel from Sonora into California. This route, also known as the Southern Emigrant Trail, enabled the first influx of settlers into the region, and in 1826, it became the official mail route between California and Mexico.

Between 1834 and 1836, secularization of the missions was implemented. In 1835, Jose Antonio Estudillo of San Diego submitted the first petition in Riverside County for the San Jacinto Rancho. Although Estudillo's petition was for 4 square leagues (approximately 30,000 acres), in 1842 he was granted close to the maximum size allowed of 11 square leagues (Lech, 2004; Perez, 1982). In 1845, Estudillo's son-in-law, Miguel de Pedrorena filed a petition for half of the San Jacinto Viejo Rancho and a small additional portion of land 2 miles to the northeast in the hills east of Lamb Canyon (Lech, 2004). This portion, the northern half of the San Jacinto Viejo Rancho, became known as the San Jacinto Nuevo y Potrero Rancho.

During the Mexican period, the Cahuilla were increasingly influenced by Mexican culture. Some of the Cahuilla acquired Spanish names, learned Spanish, and adopted forms of Spanish subsistence, such as raising cattle, agriculture, and wage labor (Ward, 1967; Bean, 1978). Several Cahuilla worked seasonally for the Mexicans, traveling to and from their villages (Bean, 1978).

4.5.1.3.3 American Period

In 1848, the United States acquired California through the Treaty of Guadalupe Hidalgo. The treaty ceded much of the American Southwest, including southern California, to the United States. As travel along the Santa Fe Trail and Southern Emigrant Trail during the early American Period brought more settlers, settlement occurred along the Santa Ana and San Jacinto waterways. In 1853, San Bernardino County was established, dividing southern California into the three counties of Los Angeles, San Bernardino, and San Diego.

In 1852, surveys were initiated in southern California with the establishment of the San Bernardino Baseline and Meridian (Lech, 2004). United States surveyors used the rectangular survey system in place since 1775, dividing the land into square townships with 36 sections each. Within the Proposed Project area, Township 7S Range 3W were the first sections to be surveyed, in 1859), and the maps were received and approved by the Surveyor General's Office in 1865.

The 1862 Homestead Act, governing rancho lands and surplus railroad lands, encouraged immigrant relocation to the western frontier for pursuit of gold and other mining, agriculture, trade, and land speculation (Robinson, 1989). This population growth in southern California created a need for mail and freight travel. In 1857, John Butterfield was awarded a $600,000-per-year, six-year contract to transport mail twice a week between St. Louis, Missouri, and San Francisco, California (Helmich, 2008). Local mail routes were developed in southern California, beginning in the 1850s, including United States Mail Company weekly stages that ran between San Diego and San Bernardino. The mail route passed through San Jacinto, and in 1870, San Jacinto's first post office opened (Lech, 2004).

Although stagecoaches were successful at transporting gold, people, and mail, the need for a railroad to California was imperative. Under the authority of the July 26, 1866 Grant-Railroad Atlantic and Pacific (Statute 14, Title 292), the Southern Pacific Railroad Company was granted land within the Proposed Project area (Land Patents issued 1879, 1883, 1892, 1894, and 1896). California received a boom in population after the completion of the transcontinental railroad in 1869, but the population of southern California did not boom until the Southern Pacific Railroad was built through the region. The Southern Pacific Railroad line from Los Angeles through the San Gorgonio Pass was completed in 1876. In 1883, the California Southern Railway allowed for travel through the Cajon Pass and down to San Diego through western Riverside County. The trains eventually were used to transport settlers into the area, creating a period of agricultural and other land development, ultimately resulting in the establishment of Riverside County in 1893.

4.5.1.3.3.1 San Jacinto Valley

Three railroad companies competed to place a railroad through the San Jacinto Valley. The California Southern Railway succeeded and began regular service on May 2, 1888, with a daily mix of freight and passenger trains between San Jacinto and Perris. The new line had few grades across the nearly level Perris, Winchester, and San Jacinto Valleys. The only major trestle crossed the San Jacinto River 1 mile east of Perris, and timber culverts crossed a number of smaller streambeds. Stations were established at Ellis (near Perris), Ethanac (Romoland), Menifee, Winchester, Enfield, Egan, and Hemet, en route to the San Jacinto terminus. Frame depot structures of the Santa Fe style were erected at Ethanac, Winchester, Hemet, and San Jacinto (Hanson, 1998).

During the early days of the American Period, the San Jacinto Valley centered on the Estudillos' stock farm on the San Jacinto Rancho (Fowler, 1912; Lech, 2004). By the 1860s, however, economic considerations forced the Estudillo family to begin selling portions of their rancho. Americans began immigrating in great numbers; by 1870, almost 100 people were living in the San Jacinto region, and orchards and farms rapidly replaced cattle ranching (Fowler, 1912; Lech, 2004). In 1871, the first irrigation ditch was constructed. By 1880, Henry Hewitt had bought approximately 8,000 acres of land in the San Jacinto Valley and was running a store and a hotel. In the early 1880s, the San Jacinto Land Association bought more than 10,000 acres of land and developed the town of New San Jacinto, which grew rapidly, and by 1886, had 250 residents, 150 houses, two hotels, a brickyard, lumberyards, a blacksmith, and a newspaper (Lech, 2004). By the early 1890s, San Jacinto had a population of 1,500, three hotels, 24 stores, and a bank, and was a thriving civic center for the region (Lech, 2004). When Riverside County was formed

in 1893, San Jacinto boasted that it exported more than it imported and was the second largest city in "size and importance" in the newly formed county (Bynon, 1992 [1893]).

4.5.1.3.3.2 Perris

In 1885, a group of local investors and residents approached the California Southern Railroad to abandon its Pinacante station in exchange for several town lots, a well to supply steam trains, and a depot. In return, the railroad would designate the new town as an official stop along the route from San Diego to San Bernardino. Fred Perris worked with the developers to survey the land, and they named the town after him. The original town site consisted of 160 acres, and the railroad ran at an angle through C and D Streets. Land speculation in Perris caused 11 additions to be filed with the San Diego County Recorder's Office. This boom came to a halt with a devastating cyclone that tore the town apart. Several buildings, including the post office, a church, and a billiard hall as well as the California Southern tracks were completely demolished. The town rebuilt, including a Queen Anne-style depot composed of brick. The depot, which still exists today, was built in 1892 (City of Perris, 2007).

4.5.1.3.3.3 Winchester

The area of Winchester also was previously known as Rockhouse and Pleasant Valley. Swiss settlers Angelo Domenigoni and Gaudenzio Garbani came to the area in 1879, and they procured large tracts of land through homesteading and purchasing. Domenigoni established a post office and school on his ranch in 1880, and soon the area became known as Rockhouse after his house, which was constructed of rock (Hudson, 1990).

The town of Winchester was founded in 1886, as land speculation had begun with Fred Perris surveying for a proposed railway line. The San Jacinto branch line of the Santa Fe Railroad arrived in 1888. In 1890, the anticipated Winchester railroad station was built. Tilla Patterson, daughter of settler John Patterson, was the Winchester station master for 40 years. By 1893, Winchester shipped more hay and grain than any other rail station in California. With the success of the railroad, community members sought to bring irrigated farming to Winchester. Although several wells provided an adequate supply of water for the residents and their animals, that supply was insufficient for large-scale irrigated farm lands. On August 3, 1893, the San Jacinto and Pleasant Valley Irrigation District was formed under a bond of $350,000, to include 18,000 acres. Canals were built on both sides of the valley, with water being brought from the North Fork of San Jacinto River in the San Jacinto Mountains. Water arrived in Winchester, but the San Jacinto and Pleasant Valley Water District was dissolved by 1899; without irrigation water, the Winchester and Pleasant Valleys remained largely a grain and livestock-raising area (Lech, 2004).

4.5.1.3.3.4 Romoland

The community of Romoland started as the post office of Ethanac on June 25, 1900, and was named by Ethan Allen Chase, a local landowner, nurseryman, and politician (Brigandi, 2000). By 1905, Ethanac was a train station on the Santa Fe line (Holmes, 1912). In 1925, a new development established by the Pacific Mutual Life Insurance Company, called Romolands Farms, was laid out north of Ethanac (Brigandi, 2000; Gunther, 1984). With the success of this

fig orchard development, the promoters wanted to change the post office name from Ethanac to Romola. However, when the United States Post Office requested a different name to avoid confusion with the town of Ramona in San Diego County, the name Romoland was adopted in 1926 (Gudde, 1969).

4.5.1.3.3.5 Menifee Valley

Menifee Valley, consisting mostly of flat terrain with small outcroppings of hills, developed later than surrounding areas and was not on a widely traveled route. The area was named after a Kentucky native, Luther Menifee Wilson, born in 1845. Wilson came to the northern part of San Diego County in 1880, and began prospecting for minerals, finding gold quartz and securing mining claims around the "Menifee Quartz Lode," which today is Murrieta Road just north of Holland Road. Menifee Valley soon saw an influx of miners and became known as Menifee Valley.

Grain farms also were established around the same time in the area. In 1880, the Kirkpatricks owned and farmed a total of 640 acres northeast of Antelope Road and Holland Road. The Kirkpatricks continued large-scale farming into the twentieth century. The Newports came to the valley in 1885, and purchased 2,000 acres to farm. Their homestead was located on the north side of Newport Road between Murrieta Road and Bradley Road. Though many other families came to this region for farming and mining, no town site was established. However, a general store was established on the south of the Newport Road and Bradley Road intersection, and a post office was established within the store. The Menifee School District was formed, and a school was constructed in the same neighborhood as the post office (Menifee Valley Historical Association, 2006).

Emil Leon Plath homesteaded 160 acres at the southwest corner of Scott Road and Briggs Road, for which he received his patent on July 20, 1892. Plath established a post office from his home in 1888. Two mines in the immediate area were given the name Leon and are on the 1893 Riverside County Map (Lech, 2004). Leon Road was named in honor of Emil Leon and his family.

4.5.1.3.3.6 Murrieta

In 1882, the Murrieta brothers deeded a right-of-way to the California Southern Railway, and two years later they announced an intention to subdivide their land and form a town site. The town of Murrieta consisted of 160 acres, divided into 537 lots laid out roughly along the railroad. By 1885, the town had a hotel, a depot, a blacksmith shop, two general stores, hardware and furniture stores, a restaurant, a meat market, and a newspaper called the Era. A year later, the town boasted 130 families, with more coming because of the California Southern Railway's use of Murrieta as an "eating station." This new status would make the Murrieta station a railroad hub for the northern part of San Diego County. In 1893, with the formation of Riverside County, Murrieta was one of 12 original judicial townships. Like other surrounding towns, Murrieta formed a water district to bring irrigated farming to the area. Unfortunately, similar to the nearby towns, the water district failed and small-scale grain farming continued (Garrison, 1963; Lech, 2004).

Three miles east of Murrieta (and east of today's Interstate 215), there were mineral-rich springs initially called the Temecula Hot Springs, as Temecula was the only named location nearby. These springs had been known to local Native Americans for centuries as Cherukanukna Hakiwuna and were believed to have healing powers. Anglos, Dr. Henry Worthington, and Alonzo Horton brought many people to the springs, making the area popular. When the town of Murrieta was established, its promoters seized on its popularity and renamed the waters Murrieta Hot Springs. In 1887, a hotel and bathhouse were built at the springs. In 1902, Fritz Guenther purchased the area, transforming it into a world-class resort and health spa. The family owned and operated the resort for over 70 years (Boyce, 1995).

4.5.1.3.4 Twentieth Century

Before the twentieth century, roads across California primarily were dirt tracks, whose creation and maintenance were a state or local responsibility (Weingroff, 1996). At the beginning of the twentieth century, interest in federal support for roads grew, and the foundation of the United States Highways System was put in place with the passage of the Federal Aid Road Act of 1916. By 1925, over 250 highways had been created and named, prompting the passage of the Federal Aid Highway Act of 1925. In 1937, Route 66 became the first highway to be completely paved (Boyer, 2001).

World War I saw a decline of farming and ranching lifestyles of the late nineteenth and early twentieth centuries, replaced by military-associated development beginning in 1916 through 1917. Construction of the Colorado River Aqueduct during the 1930s and other efforts to bring water to the region by the Eastern Municipal Water District in the 1950s also shifted remaining agriculture in the area from dry farming crops to a more diverse collection of crops, including alfalfa, the King potato, and sugar beets (City of Perris, 2007). The State Water Project was approved by the California Legislature in 1951, with construction beginning in 1957 and continuing to the present. The terminus of this approximately 600-mile-long water delivery and storage system is Lake Perris, constructed in the later part of the 1960s. Stock ranching continued in the area until the mid-1980s, while improved transportation facilitated accelerating growth of the surrounding Temecula, Murrieta, and Menifee areas as largely master-planned communities throughout the late twentieth and early twenty-first centuries.

4.5.1.4 Present-day Environmental Setting

Records searches were conducted by SCE staff at the Eastern Information Center (EIC) on May 16 and 17, 2011 and April 2013; by EIC staff on July 19, 2011; and by AECOM staff on December 18, 2012. Additional site records were obtained by AECOM from EIC on March 27, 2012, January 9, 2013, and December 4, 2013. The records searches included all of the Proposed Project area and an industry-standard 0.5 of a mile buffer of the surrounding vicinity. These searches were conducted to determine the previous cultural resources survey coverage and identify previously recorded resources.

The records search results identified 54 previous cultural resource studies within the 0.5 of a mile buffer of the Proposed Project area, dating back to 1972. Eight studies were entirely or partially within Segment 1 of the Proposed Project area but covered less than 12 percent of the area. Twenty-eight studies are documented entirely or partially within Segment 2 of the Proposed

Project area, covering almost the entirety of the area. Seven studies are documented entirely or partially within the potential material staging yards.

The records search identified 133 cultural resources within the 0.5 of a mile buffer of the Proposed Project area. These resources include 113 archaeological sites, two built environment structures, two roads, one railroad, one district, and 14 isolates (defined as three or fewer artifacts within 30 meters of each other). Of the 133 resources, 105 are prehistoric, 25 are historic, and three are multicomponent. Seventeen resources are located within the Proposed Project area and include an informally defined prehistoric archaeological district (P-33-14370), the San Jacinto Valley Railroad (CA-RIV-8196), Winchester Road (P-33-13871), two historic debris scatters (CA-RIV-4008 and P-33-14389), remains of an earthen canal (CA-RIV-4012), three multicomponent sites (CA-RIV-1175, CA-RIV-6831, and CA-RIV-8841), seven bedrock milling sites (CA-RIV-3839, CA-RIV-7060, CA-RIV-7064, CA-RIV-7065, P-33-11250, P-33-11254, and P-33-16975), and CA-RIV-2970, which is a misplot of CA-RIV-3839. Seventeen cultural resources are documented within the 0.5 of a mile buffer of the potential material staging yards. These include 12 sites, one road, one rail road, two structures, and one isolate. Of the 17 cultural resources, eight are historic and nine are prehistoric. No cultural resources are documented entirely or partially within the potential material staging yards.

In addition, AECOM reviewed historic maps, government land office plat maps, and land patent records, and conducted a contact program with historic societies and potentially interested parties. A letter was sent to the Native American Heritage Commission (NAHC) on March 22, 2012, requesting a search of its Sacred Lands File and a list of Native American individuals and organizations that might have knowledge of or concerns with cultural resources within Segment 1 of the Proposed Project area (Appendix C). A response from the NAHC was received March 23, 2012, indicating that no cultural resources are on file but the area is known to be culturally sensitive. Thirteen Native American representatives were identified by the NAHC, and letters were sent to these representatives. Letter responses were received from the Soboba Band of Luiseño Indians, the Pechanga Cultural Resources office of the Temecula Band of Luiseño Mission Indians, the Cultural Committee of the Rincon Band of Luiseño Indians, the Pala Tribal Historic Preservation Office, and the Cahuilla Tribal Environmental Protection Office.

The SCE Tribal Liaison, Brian McDonald, placed telephone calls to the tribal respondents and SCE sent comment response letters to Cahuilla, Pechanga, and Soboba. These were followed by separate meetings on July 11, 2012, with Joe Ontiveros of Soboba and Anna Hoover of Pechanga by an SCE team consisting of Brian McDonald (SCE Tribal Liaison), Rosalie Barcinas (SCE Project Manager), and Dave Hanna (SCE Project Archaeologist). The same SCE team participated in project field review and cultural site visit events with Joe Ontiveros of Soboba on July 30, 2012, and with Anna Hoover of Pechanga on September 12, 2012. Both tribal representatives expressed a high level of concern over the possibility of impacting archaeological site CA-RIV-1074 during construction of the Alternative Project and concern over the potential for making unanticipated discoveries during construction along certain segments of the Proposed Project and Alternative Project. Both representatives expressed a desire to have tribal monitors present during construction in these areas. Accordingly, SCE sent letters and a map to Soboba and Pechanga on September 28, 2012, requesting that they return shape files depicting areas of particular concern. Soboba emailed shape files to SCE on November 1, 2012, but none have been

received from Pechanga as of the submittal of this Proponent's Environmental Assessment. Soboba's mapped areas of concern recapitulate those noted verbally by Pechanga in the field.

With the addition of a reconductoring element to the Proposed Project, a new set of letters and maps was mailed by SCE to the original contacts on June 24, 2013. Two responses were received. Soboba expressed the same concerns and interests as in their original response. Rincon referred SCE to Soboba and Pechanga. After a November 20, 2013, meeting with Pechanga on a separate topic, Anna Hoover expressed verbally that the tribe had no comment beyond their original responses for the earlier definition of the Proposed Project, but anticipated continuing contacts with SCE as the Proposed Project progresses.

An intensive pedestrian archaeological survey of the Proposed Project area and potential material staging yards was conducted by qualified AECOM archaeologists on April 2 through 6, 2012, January 8, 2013, and December 3 through 5, 2013. The survey was conducted within defined route corridors using 10- to 15-meter transects. These corridors were defined in detail to exclude developed areas and undeveloped areas lying inside front-yard fencing, because these areas would not be affected by Proposed Project construction. Agriculturally modified vegetation communities were surveyed, based on the level of access and density of vegetation. Fallow fields were examined to the extent feasible, while active and densely vegetated fields were not systematically surveyed; however, bedrock outcrops within active vegetation fields were examined. All other areas, including those in dense vegetation, were surveyed as intensively as the environment allowed. For all survey efforts, surveyors used 7.5-minute United States Geological Survey (USGS) topographic maps and larger-scale aerial photographs, as well as hand-held submeter global positioning system (GPS) units loaded with shape files of the Proposed Project area, for orientation and to record resources and survey coverage.

When an archaeological site was encountered, the survey crew determined the location with a handheld GPS unit and, if previously recorded, with reference to existing site record forms. Previously recorded sites were checked against the existing documentation for any changes in site constituents, condition, or boundaries. Detailed information was recorded for both newly and previously recorded resources. If warranted, sites were temporarily marked with pin flags to aid in recording. An arbitrary distance of 50 meters between artifacts and features was used to divide cultural material into individual sites. Site recordation included photographic documentation (site overviews and detail shots, including diagnostic artifacts), site sketch maps as appropriate (recorded with submeter GPS units), artifact and feature descriptions, and environmental context. A non-collection strategy was employed, and all pin flags were removed after recordation. Newly discovered and updated sites were recorded on the requisite California Department of Parks and Recreation (DPR) forms.

AECOM also conducted an architectural study of the Proposed Project to determine whether historic buildings and structures older than a conservative 45 years from Segment 1 of the estimated Proposed Project completion date are present. Available aerial photographs and historic maps of the Proposed Project area were reviewed to identify potential buildings and structures. An architectural survey of Segment 1 of the Proposed Project was conducted on April 4, 2012, and an architectural review of Segment 2 of the Proposed Project was conducted in May 2014. A single-family residence was identified in Segment 2 of the Proposed Project as a built environmental resource; however, because built environment resources within Segment 2 of the

Proposed Project would not likely be affected by reconductoring activities, this resource was not evaluated for eligibility for the California Register of Historical Resources (CRHR), nor was it formally recorded on DPR 523 forms.

The cultural resources survey identified 25 resources within the Proposed Project area, 17 that were previously recorded resources and eight that were newly identified. Of the resources, 19 are archaeological sites, of which four are historic, three are multicomponent, and 12 are prehistoric. The remaining resources include a portion of an informally defined prehistoric archaeological district, one railroad, one historic road, one historic structure, and two isolated finds. The resources identified in the Proposed Project area are described in Table 4.5-1 Cultural Resources Identified in the Proposed Project Area.

Preliminary engineering for the Proposed Project has been conducted, focusing on the installation of the 115 kV subtransmission line and associated components and includes transmission and guy pole locations, staging yards, stringing setup areas, pulling locations, guard structures/locations, access roads, and overland access to the pole locations. All cultural resource locations and boundaries were compared with the locations and dimensions of the project design components. Proposed Project design components are within the site boundaries of three resources: CA-RIV-3839, CA-RIV-8196, and CA-RIV-11743.

In addition, Segment 1 the Proposed Project crosses through an informally defined prehistoric archaeological district, P-33-14370. P-33-14370 is described here as an "informally defined archaeological district" because no State Historic Preservation Officer review or determination is known to have ever been made for this district.

Table 4.5-1 Cultural Resources Identified in the Proposed Project Area

Site Number/ Temporary Number	Site Type	Time Period	Site Description
Previously Recorded Resources			
CA-RIV-1175	Site	Multicomponent	Four bedrock milling slicks, lithic scatter, historic trash debris
CA-RIV-3839	Site	Prehistoric	Bedrock milling complex with three loci consisting of 17 milling elements, an associated lithic scatter, and a rock shelter
CA-RIV-8196	Railroad	Historic	San Jacinto Valley Railroad
P-33-13871	Road	Historic	Winchester Road
P-33-14389	Site	Historic	Subsurface deposit of historic-era and modern-era refuse; not relocated

Site Number/ Temporary Number	Site Type	Time Period	Site Description
P-33-14370	District	Prehistoric	Informally defined prehistoric archaeological district containing lithic scatters, bedrock milling features, petroglyphs, cairns, burial, hearth, rock shelter, and habitation debris
Resources within P-33-14370			
CA-RIV-4008	Site	Historic	Scatter of historic trash; not relocated
CA-RIV-4012	Site	Historic	San Jacinto and Pleasant Valley Company Canal
CA-RIV-6831	Site	Multicomponent	Two granitic outcrops with 10 milling slicks, and late-1800s- to mid-1900s-era refuse scatter concentrated primarily around the outcrop; not relocated
CA-RIV-7060	Site	Prehistoric	Single bedrock outcrop containing one milling slick; not relocated
CA-RIV-7064	Site	Prehistoric	Three granite outcrops containing nine milling slicks
CA-RIV-7065	Site	Prehistoric	Single granitic outcrop containing one milling slick
P-33-11250	Site	Prehistoric	Single bedrock boulder with two milling slicks
P-33-11254	Site	Prehistoric	Single bedrock boulder with two milling slicks
P-33-16975	Site	Prehistoric	Single bedrock boulder with one milling slick
P-33-21021	Site	Multicomponent	CA-RIV-8841 features A–F (concrete foundations, historic trash, and an isolated prehistoric milling slick), split from CA-RIV-8841 feature G
P-33-21022	Site	Historic	CA-RIV-8841 feature, water conveyance feature, split away from CA-RIV-8841 features A–F

Site Number/ Temporary Number	Site Type	Time Period	Site Description
Newly Identified Resources			
CA-RIV-10889	Site	Prehistoric	Single bedrock milling feature with two milling elements
CA-RIV-10891	Site	Prehistoric	Single bedrock milling feature with two milling elements
CA-RIV-10893	Site	Prehistoric	Two granitic boulders containing two milling elements
CA-RIV-11743	Site	Prehistoric	Milling complex with over 13 features and 50 milling elements, groundstone artifacts, and lithic debitage
CA-RIV-11744	Site	Prehistoric	Lithic scatter
P-33-21023 (28680 Leon Rd)	Structure	Historic	Single-story front-gabled single-family residence
Newly Identified Isolates			
P-33-21030	Isolate	Prehistoric	Quartz debitage fragment
P-33-023914	Isolate	Prehistoric	Metate fragment

Table 4.5-2 Historical Resources within Proposed Project Design Components Area

Site Number/ Temporary Number	Time Period	Resource Type	Site Type	CRHR Eligibility Recommendation*
CA-RIV-1175	Multicomponent	Site	Bedrock milling, lithic scatter, and historic refuse scatter	Not significant
CA-RIV-3839	Prehistoric	Site	Bedrock milling site, lithic scatter, and rock shelter	Test excavated (McKenna, 2003); not significant
CA-RIV-8196	Historic	Railroad	Transportation route	Potentially eligible for CRHR under Criterion 1
P-33-14389	Historic	Site	Historic refuse scatter	Not significant

Site Number/ Temporary Number	Time Period	Resource Type	Site Type	CRHR Eligibility Recommendation*
P-33-14370	Prehistoric	District	Archaeological district	Potentially eligible for CRHR under Criterion 4
CA-RIV-6831	Multicomponent	Site	Bedrock milling station and historic refuse scatter	Previously mitigated to a level less than significant (CRM Tech, 2003, 2004)
CA-RIV-7065	Prehistoric	Site	Bedrock milling station	Test excavated (Hogan, et al. 2004); not significant
CA-RIV-11743	Prehistoric	Site	Bedrock milling site, lithic scatter	Potentially eligible for CRHR under Criterion 4
P-33-21021	Multicomponent	Site	Bedrock milling station, foundations, and historic refuse scatter	Previously CA-RIV-8841; within informally defined prehistoric archaeological district (P-33-14370) but lacks independent CRHR eligibility
P-33-11254	Prehistoric	Site	Bedrock milling station	Within informally defined prehistoric archaeological district (P-33-14370) but lacks independent CRHR eligibility
P-33-16975	Prehistoric	Site	Bedrock milling station	Within informally defined prehistoric archaeological district (P-33-14370) but lacks independent CRHR eligibility

Note:
* Please see CEQA Archaeological Site Significance Criteria below in Section 4.5.2.2.

4.5.2 Cultural Resources Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.5.2.1 Federal

There are no federal regulations related to cultural resources that would apply to the Proposed Project.

4.5.2.2 State

State regulations affecting cultural resources include Public Resources Code (PRC) Sections 21083.2 and 21084.1, and California Environmental Quality Act (CEQA) Guidelines Section 15064.5, and Appendix G.

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 states that a project may have a significant environmental effect if it causes a substantial adverse change in the significance of a historic resource. Additionally, the lead agency must consider properties eligible for listing in the CRHR or that are defined as a unique archaeological resource in PRC Section 21083.2.

California Register of Historical Resources

Cultural resources include archaeological and historic objects, sites, and districts; historic buildings and structures; and sites and resources of concern to local Native Americans and other ethnic groups. Cultural resources that meet the criteria of eligibility to the CRHR are termed "historic resources." Archaeological resources that do not meet CRHR criteria also may be evaluated as "unique"; impacts to such resources could be considered significant, as described below.

A site meets the criteria for inclusion on the CRHR if:

a. It is associated with events that have made a significant contribution to the broad patterns of California's History and Cultural Heritage
b. It is associated with the life or lives of a person or people important to California's past
c. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
d. It has yielded, or may be likely to yield, information important to prehistory or history

A resource eligible for the CRHR must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register of Historic Places (NRHP), but it may still be eligible for listing in the CRHR.

The CRHR automatically includes the following:

- California properties listed in the NRHP and those formally Determined Eligible for the NRHP
- California Registered Historical Landmarks from No. 770 onward
- Those California Points of Historical Interest that have been evaluated by the Office of Historic Preservation (OHP) and have been recommended to the State Historical Commission for inclusion in the CRHR

Other resources that may be nominated to the CRHR include:

- Historical resources with a significance rating of Category 3 through 5
- Individual historical resources
- Historical resources contributing to historic districts
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone

Impacts to "unique archaeological resources" also are considered under CEQA, as described under PRC 21083.2. A unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

- Contains information needed to answer important scientific questions and there is a demonstrable public interest in that information
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person
- A non-unique resource is one that does not fit the above criteria

4.5.2.2.1 State Public Resources Code and California's Health and Safety Code

Other California laws and regulations applicable to cultural resources would also be applicable. For example, if human remains are discovered during any phase of Proposed Project construction, ground-disturbing activity is required to be halted immediately within the vicinity of the find, and the county coroner must be notified immediately, pursuant to Section 5097.98 of the PRC, Sections 7050.5 and 8010-8011 of California's Health and Safety Code, and CEQA Guidelines Section 15064.5 (e)(1). Per Section 5097.98 of the PRC, if the remains are determined by the county coroner to be Native American, the NAHC must be notified within 24 hours. The NAHC must identify a Most Likely Descendant, who would be designated to cooperate with the owner of the land on which the remains were discovered to arrange for the proper disposition of the remains, according to the NAHC guidelines for the treatment and disposition of human remains.

4.5.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The majority of the Proposed Project crosses the jurisdiction of Riverside County. The Riverside County General Plan Multipurpose Open Space Element was adopted in October 2008 and outlines the county's intentions for protecting cultural and archaeological resources (Riverside County, 2008). Relevant goals and policies listed in the Riverside County General Plan Multipurpose Open Space Element include the following:

- OS 19.2. Review all proposed development for the possibility of archaeological sensitivity
- OS 19.3. Employ procedures to protect the confidentiality and prevent inappropriate public exposure of sensitive archaeological resources when soliciting the assistance of public and volunteer organizations
- OS 19.4. Require a Native American Statement as part of the environmental review process on development projects with identified cultural resources

City of Menifee General Plan

Portions of Segment 1 of the Proposed Project would be located within the City of Menifee. The City of Menifee General Plan was adopted on December 20, 2013. The Open Space and Conservation Element of the City of Menifee General Plan discusses the City of Menifee's intentions to protect cultural resources (City of Menifee, 2013). Relevant policies listed in the City of Menifee General Plan Open Space and Recreation Element include the following:

- Policy OCS-5.1. Preserve and protect archaeological and historic resources and cultural sites, places, districts, structures, landforms, objects and native burial sites, traditional cultural landscapes and other features, consistent with state law and any laws, regulations or policies which may be adopted by the City to implement this goal and associated policies
- Policy OCS-5.3. Preserve sacred sites identified in consultation with the appropriate Native American tribes whose ancestral territories are within the City, such as Native American burial locations, by avoiding activities that would negatively impact the sites, while maintaining the confidentiality of the location and nature of the sacred site
- Policy OCS-5.4. Establish clear and responsible policies and best practices to identify, evaluate, and protect previously unknown archaeological, historic, and cultural resources, following applicable CEQA and NEPA procedures and in consultation with the appropriate Native American tribes who have ancestral lands within the City

- Policy OCS-5.5. Develop clear policies regarding the preservation and avoidance of cultural resources located within the City, in consultation with the appropriate Native American tribes who have ancestral lands within the City
- Policy OCS-5.6. Develop strong government-to-government relationships and consultation protocols with the appropriate Native American tribes with ancestral territories within the City in order to ensure better identification, protection and preservation of cultural resources, while also developing appropriate educational programs, with tribal participation, for Menifee residents

City of Murrieta General Plan

A small portion of Segment 1 of the Proposed Project would be located within the City of Murrieta. The City of Murrieta General Plan 2035 was adopted on July 19, 2011. As defined in the General Plan's Conservation Element, cultural resources refer to archaeological remains, historic buildings, traditional customs, tangible artifacts, historical documents, and public records, which make Murrieta unique or significant (City of Murrieta, 2011).

Relevant goals and policies listed in the City of Murrieta General Plan Conservation Element include the following:

- CSV-11.1. Promote the protection and preservation of archaeological, cultural, historical, and architecturally significant sites, structures, districts, Native American resources, and natural features throughout the community. Preferred methods of protection include avoidance of impacts, placing resources in designated open space and allocation of local resources and/or tax credits as feasible
- CSV-11.3. Promote the designation of eligible resources to the City Register of Cultural Resources, the County Landmarks Program, or other regional, state, or federal programs
- CSV-11.5. Comply with state and federal law regarding the identification and protection of archaeological and Native American resources, and consult early with the appropriate tribal governments
- CSV-11.9. Exercise sensitivity and respect for all human remains, including cremations, and comply with all applicable state and federal laws regulating human remains

City of Murrieta Municipal Code

The City of Murrieta Municipal Code establishes methods for the identification, protection, enhancement, and perpetuation of cultural resources or identified historic preservation areas and their use in the interest of the public's enrichment (Municipal Code, Title 16, Article III, Chapter 16.26). This code provides criteria for the designation of cultural resources, archaeological districts, or historic preservation districts by the City Council (City of Murrieta, 2001).

City of Perris General Plan

Material Staging Yard 3 is proposed to be located within the City of Perris. The City of Perris General Plan Conservation Element was approved on July 12, 2005 (City of Perris, 2005). Relevant goals and policies listed in the City of Perris General Plan Conservation Element include the following:

- IV. Protection of historical, archaeological and paleontological sites.
  - IV.A. Comply with state and federal regulations and ensure preservation of the significant historical, archaeological and paleontological resources.

City of Temecula General Plan

A portion of Segment 2 of the Proposed Project would be located within the City of Temecula. The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2005). Relevant purposes, goals, and policies listed in the Open Space/Conservation Element include the following:

- Purpose:
  - Guide development in order to make wise and prudent use of natural, environmental, and cultural resources
  - Maintain and promote the cultural, historic, and archaeological heritage of Temecula

- Goal 6. Preservation of significant historical and cultural resources
  - Policy 6.1. Maintain an inventory of areas with archaeological/paleontological sensitivity, and historic sites in the Planning Area
  - Policy 6.2. Work to preserve or salvage potential archeological and paleontological resources on sites proposed for future development through the development review and mitigation monitoring processes
  - Policy 6.4. Assist property owners in seeking state and/or federal registration and appropriate zoning for historic sites and assets
  - Policy 6.7. Encourage use of California's Historic Building Code when preserving/rehabilitating historic structures
  - Policy 6.8. Support an integrated approach to historic preservation in coordination with other affected jurisdictions, agencies, and organizations for areas within the Planning Area and surrounding region that seeks to establish linkages between historic sites or buildings with other historic features such as roads, trails, ridges, and seasonal waterways
  - Policy 6.9. Encourage the preservation and re-use of historic structures, landscape features, roads, landmark trees, and trails
  - Policy 6.10. Work with the Pechanga Band of Luiseño Indians to identify and appropriately address cultural resources and tribal sacred sites through the development review process
  - Policy 6.11. Encourage voluntary landowner efforts to protect cultural resource and tribal sacred sites consistent with state requirements

The following actions, procedures, strategies, and techniques implement the goals and policies of the Open Space/Conservation Element:

- OS-27. Historic Preservation Program
  - Continue to implement a historic preservation ordinance in the Old Town area to protect historically significant buildings, sites, road/trails, and other landscape elements, and to encourage their re- use, where appropriate. Consider adopting an ordinance to address preservation of other historic resources. Encourage owners of local sites to apply for recognition in the State Historic Resources Inventory, as Riverside County Landmarks, as State Points of Historic Interest, as State Landmarks, and as sites on the National Register of Historic Places, as deemed necessary

- OS-37. Archeological Reviews
  - Enter into a Memorandum of Agreement with the Eastern Information Center of the University of California, Riverside to establish procedures for reviewing the archaeological sensitivity of sites proposed for development

- OS-39. Tribal Cultural Resources
  - Development projects proposed on previously undeveloped property which involve earth-disturbing activities or which are located in areas with previously identified cultural resources need to comply with the following requirements to appropriately address tribal cultural resources:
    - All projects shall be evaluated by a qualified archeologist by conducting a site records search, and if feasible, a Phase I walk-over survey, and if necessary, a Phase II survey prior to project approval to identify the potential for the presence of significant cultural resources
    - If significant resources are located on the project site, or a high probability for cultural resources exists, the Pechanga Band of Luiseño Indians shall be consulted in the identification of mitigation measures to address impacts consistent with state requirements, including provisions to address inadvertent discoveries
    - During on-site grading activities in areas with cultural resources, or with a high potential for cultural resources, a qualified archeologist and tribal monitors shall be on-site to monitor grading operations
    - In the event of the discovery of a burial site, human bone or suspected human bone, grading in the immediate area shall be immediately halted, the site protected, and the County Coroner and representatives from Pechanga Band of Luiseño Indians notified

4.5.3 Significance Criteria

The significance criteria for assessing the impacts to cultural resources come from the CEQA Environmental Checklist. According to the CEQA 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 archeological resource pursuant to Section 15064.5
- Disturb any human remains, including those interred outside of formal cemeteries

State laws affecting cultural resources include PRC Sections 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5 and Appendix G. CEQA requires the lead agency to carefully consider the effects a project may have if it causes a substantial adverse change in the significance of a historic or archaeological resource.

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 states that a project may have a significant environmental effect if it causes a substantial adverse change in the significance of a historic resource. Additionally, the lead agency must consider properties eligible for listing in the CRHR or that are defined as a unique archaeological resource in PRC Section 21083.2.

4.5.4 Cultural Resource Impact Analysis

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

Construction

No Impact. Of the 3 individual cultural resources within or near Proposed Project design components, one is not eligible for the CRHR. CA-RIV-3839 was previously test excavated and found not to be eligible for the CRHR (McKenna, 2003). Therefore, Proposed Project impacts on this individual site would not constitute substantial adverse change in the significance of historical resources. Although Segment 1 of the Proposed Project crosses the informally defined prehistoric archaeological district (P-33-14370), this corridor previously was disturbed by construction of Leon Road and installation of a 12 kV distribution line, and therefore construction of the Proposed Project would not cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.

CA-RIV-11743 is a newly identified milling complex with over 13 features and 50 elements, and contains associated groundstone artifacts and lithic debitage. While the site has been disturbed by the construction of the existing transmission line access road and the building of the San Diego Aqueduct, the site appears to retain integrity and is recommended as potentially eligible for the CRHR under Criterion 4. An existing pole is located within the site boundary; however, it has not been identified as needing replacement and no impact to this resource is anticipated.

The remaining resource, CA-RIV-8196, is a segment of the San Jacinto Valley Railroad and potentially is eligible for the CRHR under Criterion 1 (Beedle, 2005; Hamilton and George,

2009). The character-defining feature making this resource eligible is the historical alignment of the route itself, although because of physical modification over time, the resource has lost integrity of materials. Based on preliminary engineering, two subtransmission poles are proposed on either side of the railroad south of the intersection of Grand Avenue and Leon Road. Additionally, two guy stub poles that are proposed for removal are located along the railroad and a splice stringing setup area is proposed to be located along the railroad. Proposed Project construction impacts from these activities would not affect the character-defining feature making the railroad route eligible for the CRHR. Therefore, construction of the Proposed Project would not cause a substantial adverse change impairing the significance of the resource.

Because no substantial adverse changes would occur related to a historical resource as defined in CEQA Guidelines Section 15064.5, no impact would occur.

Operation

No Impact. During Operations and Maintenance (O&M) of the Proposed Project, routine inspections and emergency repair would require the use of vehicles and equipment. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. Most regular O&M activities of overhead facilities are performed from existing access roads with no surface disturbance. Repairs done to existing facilities, such as repairing or replacing existing poles, could occur in undisturbed areas. However, since the Proposed Project's facilities would not impact cultural resources, O&M of those same facilities would not impact cultural resources. Therefore, no impact would occur.

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

Construction

No Impact. The records search and pedestrian survey indicate that there are no archeological resources present, therefore no substantial adverse changes would occur related to an archaeological resource as defined in California Code of Regulations Title 14, Section 15064.5, no impact would occur.

Operation

No Impact. Since the Proposed Project's facilities would not impact cultural resources, O&M of those same facilities would not impact cultural resources. Therefore, no impact would occur.

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

Construction

Less Than Significant Impact. The Proposed Project would not disturb any known human remains, including those interred outside of formal cemeteries. Encountering human remains is unlikely because the results of the records search and pedestrian field surveys do not indicate the presence of sites likely to contain human remains within areas that would be disturbed by the Proposed Project. If human remains were encountered during construction, all work would stop and the county coroner and a qualified archaeologist would be notified, pursuant to PRC Sections 5097.98 and 5097 and CEQA Guidelines Section 15064.5 (e)(1), ensuring that impacts would be less than significant.

Operation

Less Than Significant Impact. Since the Proposed Project's facilities are not expected to affect human remains, O&M of those same facilities also is not expected to impact human remains. However, if human remains were encountered during construction, all work would stop and the county coroner and a qualified archaeologist would be notified, pursuant to PRC Sections 5097.98 and 5097 and CEQA Guidelines Section 15064.5 (e)(1), ensuring that impacts would be less than significant.

4.5.5 Paleontological Resources

4.5.5.1 Environmental Setting

The Proposed Project is located in the Peninsular Ranges Province of southern California, within the Perris Block. The Peninsular Ranges are a northwest–southwest-oriented complex of blocks, separated by similarly trending faults (Norris and Webb, 1976). Metamorphic and plutonic igneous rocks of Triassic and Cretaceous-age, respectively, are exposed in the northern and southern parts of the Proposed Project area, while the majority of the Proposed Project area is underlain by alluvial and valley sediments that span Pleistocene time through the present.

The Santa Ana 30-minute- by 60-minute-degree quadrangle geological map, which includes the Proposed Project, was reviewed for this analysis (Morton and Miller, 2006). According to this map, 13 geologic units (groups, formations, members, and informally named surficial deposits) occur within the Proposed Project (Table 4.5-3 Geologic Formations, Map Abbreviations, and Descriptions of Units Found within the Proposed Project Area). These units include Triassic-aged metamorphic rocks (Trmq and Trmu), Cretaceous-aged igneous rocks (Kdvg), (Kgb), (Kpvg), (Kpvt), Quaternary very old alluvium (Qvoa), Quaternary very old fan (Qvof), Quaternary old fan (Qof), Pauba Formation (Qps), Quaternary younger alluvium (Qya), Quaternary younger fan (Qyf), and Quaternary younger valley deposits (Qyv) (Morton and Miller, 2006).

Table 4.5-3 Geologic Formations, Map Abbreviations, and Descriptions of Units Found within the Proposed Project Area

Geologic Formation/Unit Name	Geologic Formation/Unit Map Abbreviation	Geologic Formation Unit Description (Morton and Miller, 2006)
Triassic quartz-rich rocks	Trmq	Quartzite and quartz-rich metasandstone; locally conglomeratic
Triassic rocks of Menifee Valley, undifferentiated (Triassic)	Trmu	Wide variety of low- to high-metamorphic grade metamorphic rocks. Most units contains biotite schist; some low-grade rocks have primary sedimentary structures
Cretaceous granodiorite and tonalite of Domenigoni Valley	Kdvg	Relatively uniform, massive hornblende-biotite granodiorite grading into tonalite. This is principal rock type of Domenigoni Valley Pluton. Contains some mafic rich rocks in southern part of pluton. Common accessory minerals are zircon, sphene, apatite, and magnetite-ilmenite. Minute rutile crystals impart bluish opalescence to quartz. Small masses of epidote and/or tourmaline minerals occur locally and appear to replace granodiorite to tonalite.
Gabbro, undifferentiated (Cretaceous)	Kgb	Mainly hornblende gabbro.
Cretaceous monzogranite to granodiorite	Kpvg	Pale gray, massive, medium-grained hypidiomorphic-granular biotite monzogranite, and less abundant hornblende-biotite granodiorite forming older ring dike.
Cretaceous tonalite	Kpvt	Foliated biotite-hornblende tonalite. In eastern part of complex grades into granodiorite
Quaternary very old alluvium, Quaternary very old axial-channel deposits (middle to early Pleistocene)	Qvoa	Alluvial deposits dominated by sand, but containing scattered gravel and pebble layers, and silt, and clay-bearing alluvium. Typically well-consolidated to moderately to well-indurated, reddish-brown, highly pigmented in upper parts. May not show generic relationship to modern drainages, but originally deposited on canyon floors.

Geologic Formation/Unit Name	Geologic Formation/Unit Map Abbreviation	Geologic Formation Unit Description (Morton and Miller, 2006)
Quaternary very old alluvial-fan deposits (middle to early Pleistocene)	Qvof	Moderately to well-consolidated silt, sand, gravel, and conglomerate. Subdivided units are distinguished on basis of soil-profile development, relative position in local terrace-riser succession, and overlapping relationships. In much of the Peninsular Ranges area, unit is moderately well-consolidated orangish-brown sand and silt that is typically well dissected.
Quaternary old alluvial-fan deposits (late to middle Pleistocene)	Qof	Moderately- to well-consolidated silt, sand, and gravel. Subunits are distinguished on basis of soil-profile development, degree of dissection, and relative position in local terrace-riser succession.
Pauba Formation (middle Pleistocene)	Qps	Brown, moderately well-indurated, cross-bedded sandstone containing sparse cobble- to boulder-conglomerate beds.
Quaternary younger alluvium, young axial-channel deposits (Holocene and late Pleistocene)	Qya	Slightly to moderately consolidated silt, sand, and gravel deposits. Units distinguished from each other on basis of soil-profile development, relative position in local terrace-riser succession, and degree of erosional dissection.

Geologic Formation/Unit Name	Geologic Formation/Unit Map Abbreviation	Geologic Formation Unit Description (Morton and Miller, 2006)
Quaternary young alluvial-fan deposits (Holocene and late Pleistocene)	Qyf	Unconsolidated to moderately consolidated silt, sand, pebbly cobbly sand, and bouldery alluvial-fan deposits having slightly to moderately dissected surfaces. Young alluvial-fan deposits, including subunits, constitute most widespread, and probably greatest in terms of sediment volume, of all Quaternary units. Forms large and small fans throughout quadrangle. Close to mountains, unit typically contains large proportion of cobbles and boulders. Except where coarser-grained lenses are present, stratification is obscure. Clast compositions, especially in upper third of fans, reflect bedrock source areas and clast compositions of nearby older Quaternary units.
Quaternary young alluvial-valley deposits (Holocene and late Pleistocene)	Qyv	Fluvial deposits along valley floors. Consists of unconsolidated sand, silt, and clay-bearing alluvium.

The igneous and metamorphic rocks of this area have low paleontological sensitivity because they were formed in conditions that are not suitable for the preservation of fossils. These rocks include Triassic-age metamorphic rocks (Trmq and Trmu), which are variable-grade metamorphic schists, Cretaceous-aged tonalite and granodiorite (Kdvg and Kpvg), and Cretaceous-aged gabbro (Kgb). The Riverside County Paleontological Resources Sensitivity Map (PRSM; Riverside County, 2008) ranks these units as having Low sensitivity. The Quaternary-aged sedimentary deposits within the Proposed Project are ranked as High B sensitivity by the PRSM (e.g., Qvoa, Qvof, Qof, Qya, Qyf, and Qyv), the younger Holocene-age (less than 10,000 years old) deposits (e.g., Qya, Qyf, and Qyv) mapped at the surface are not anticipated to yield paleontological resources. However, these relatively young sedimentary deposits may overlie older Pleistocene age deposits, which do have the potential to yield paleontological resources, at depth (McLeod, 2013; Scott, 2013; Aron et al., 2014). Additionally, the Pauba Formation is assigned a High A paleontological sensitivity wherever it occurs.

The records search results (Aron and Kelly, 2012; Aron et al., 2014) indicate that no previously recorded paleontological resource localities are known in the Proposed Project area. However, paleontologic resource localities San Bernardino County Museum (SBCM) 5.6.620 through 5.6.627, 5.6.671 through 5.6.683, 5.6.857 through 5.6.865, and 5.6.868 through 5.6.875 are located within 1 mile of the Proposed Project. These localities yielded fossil remains of extinct southern mammoth (*Mammuthus meridionalis*); large camel (*Camelops hesternus*); and small

vertebrates, including rabbits, rodents, and lizards. The proximity of these localities to the Proposed Project area demonstrates the high paleontological sensitivity of fossiliferous Pleistocene alluvium in the region. This sensitivity is reinforced by the proximity of the Proposed Project to Diamond Valley Lake, where fossil localities are present approximately 2.5 miles east of Leon Road; construction of this lake resulted in the recovery of several thousand fossils of late Pleistocene age from subsurface Pleistocene alluvium (Anderson et al. 2002; Springer et al. 2009, 2010; Scott, 2010, 2012), as shallow as 2.5 feet below the surface. A museum in Hemet, the Western Science Center, was built specifically to hold the world class fossils recovered from Diamond Valley Lake. According to McLeod (2013), nearby Skinner Reservoir, due east of the Proposed Project area, yielded specimens of fossil mammoth (*Mammuthus*) and bison (*Bison*) from Natural History Museum of Los Angeles County (LACM) locality 7261. Another locality, LACM 5168, located northwest of the Proposed Project area, in the vicinity of Railroad Canyon Reservoir, yielded specimens of extinct fossil horse (*Equus*). Closer to Lake Elsinore, a specimen of fossil camel (*Camelops*) was recovered from older Quaternary deposits, similar to those mapped within the Proposed Project area (McLeod, 2013).

The middle to early Pleistocene Pauba Formation has also produced fossil localities generally southwest of the southern terminus of the Proposed Project area (McLeod, 2013). These localities (LACM 5447, 5789, and 5891-5892) have produced fossil horse specimens from the Pauba Formation (McLeod, 2013). Microvertebrate specimens have also been recovered from this formation (pocket gopher, *Thomomys*, and rabbit, *Leporidae*) southeast of the southern terminus of the Proposed Project area (McLeod, 2013). According to the records search completed by the SBCM, localities SBCM 5.6.839 – 5.6.841 are recorded within 0.25 to 0.5 of a mile of the paleontological study area and produced ground sloth and mammoth specimens from the Pauba Formation (Scott, 2013). Over 400 fossil collecting localities are known from the Pauba Formation and the underlying unnamed sandstone unit in the Murrieta and Temecula areas (Scott, 2013). These deposits have yielded the following Ice Age mammals: ground sloth, mammoth, mastodon, horse, tapir, camel, llama, pronghorn, dire wolf, short-faced bear, and saber-toothed cat (Scott, 2013). Additionally, microvertebrates have also been recovered from these same age deposits in the region, including rodent, rabbit, bat, shrew, bird, lizard, turtle, and tortoise.

A linear field survey (pedestrian examination of all outcrops) of the Proposed Project was completed in April 2012, January 2013, and December 2013. No fossils were observed within the Proposed Project area during the field survey.

4.5.6 Paleontological Resources Regulatory Setting

4.5.6.1 Federal

There are no federal regulations related to paleontological resources that would apply to the Proposed Project.

4.5.6.2 State

Paleontological resources consist of fossilized evidence of prehistoric plants or animals preserved in rock or soil, that are of paleontological interest and that provide information about the history of life on earth, with the exception of materials associated with cultural resources. Appendix G (part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, which states, "a project will normally result in a significant impact on the environment if it will …disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the PRC specifies that any unauthorized removal of paleontological remains is a misdemeanor.

4.5.6.3 Local

The CPUC has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC G.O. 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county's and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The majority of the Proposed Project crosses the jurisdiction of Riverside County. The Riverside County General Plan Multipurpose Open Space Element was adopted in October 2008 and outlines the County's intentions for protecting paleontological and geological resources (Riverside County, 2008). Relevant goals and policies listed in the Riverside County General Plan Multipurpose Open Space Element include the following:

- OS 19.8. Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated
- OS 19.9. This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading
- OS 19.10. Transmit significant development applications subject to CEQA to the San Bernardino County Museum for review, comment, and/or preparation of recommended conditions of approval with regard to paleontological resources

City of Menifee General Plan

While Segment 2 of the Proposed Project would not be located within the City of Menifee, portions of Segment 1 of the Proposed Project would be located within the City of Menifee. The City of Menifee General Plan was adopted on December 20, 2013. The Open Space and Conservation Element of the City of Menifee General Plan discusses the City of Menifee's intentions to protect paleontological resources (City of Menifee, 2013). According to the Open Space and Conservation Element, the City of Menifee has been inventoried for geological formations known to potentially contain paleontological resources. Paleontological resources are the fossilized biotic remains of ancient environments. These resources are valuable for the information they yield about the history of the earth and its past ecological settings. Except for the western border of the city, Menifee's hills generally lack potential for significant fossil resources. These hills, which make up the western boundary of the city, incorporate low-lying areas and have undetermined potential to contain fossil resources. On the other hand, the City of Menifee's alluvial plains and sediments flanking the base of the hills throughout the city are ranked as highly sensitive for finding significant fossils. Past recoveries include fossils from the Pleistocene period, including mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, horses, camels, and bison. The Open Space and Conservation Element for Paleontological and Cultural Resources (OSC-5) contains an exhibit (Exhibit OSC-4) that characterizes the City of Menifee's paleontological resources into categories of high, low, and undetermined sensitivity. However, there are no policies explicitly related to paleontological resources.

While Segment 2 of the Proposed Project would not be located within the City of Murrieta, a small portion of Segment 1 of the Proposed Project would be located within the City of Murrieta. The City of Murrieta General Plan 2035 was adopted on July 19, 2011. Within the General Plan's Conservation Element, paleontological resources are defined as "fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants" (City of Murrieta, 2011). Relevant goals and policies listed in the City of Murrieta General Plan Conservation Element include the following:

- CSV-7. Paleontological resources are conserved as a record of the region's natural history
  - CSV-7.1. Continue development review procedures that protect paleontological resources

City of Perris General Plan

Material Staging Yard 3 is located within the City of Perris. The City of Perris General Plan Conservation Element was approved on July 12, 2005 (City of Perris, 2005). The Conservation Element defines areas of paleontological resource sensitivity and provides a map of the sensitivity areas. Relevant goals and policies listed in the City of Perris General Plan Conservation Element include the following:

- IV. Protection of historical, archaeological and paleontological sites

  - IV.A. Comply with state and federal regulations and ensure preservation of the significant historical, archaeological, and paleontological resources

City of Temecula General Plan

While Segment 1 of the Proposed Project would not be located within the City of Temecula, a portion of Segment 2 of the Proposed Project would be located within the City of Temecula. The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2005). The Open Space/Conservation Element (City of Temecula, 2005) contains specific goals and policies relevant to Paleontological Resources:

- Goal 6. Preservation of significant historical and cultural resources
  - Policy 6.1. Maintain an inventory of areas with archaeological/paleontological sensitivity, and historic sites in the Planning Area
  - Policy 6.2. Work to preserve or salvage potential archeological and paleontological resources on sites proposed for future development through the development review and mitigation monitoring processes

4.5.7 Paleontological Resources Significance Criteria

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

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Appendix G (part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, which states, "a project will normally result in a significant impact on the environment if it will …disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." PRC Section 5097.5 specifies that any unauthorized removal of paleontological remains is a misdemeanor.

4.5.8 Paleontological Resources Impact Analysis

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

Construction

Less Than Significant Impact. The field survey results indicate that no fossils are currently located on the ground surface within the Proposed Project area. Therefore, no adverse impacts to surface fossils are anticipated. It is possible based on the geology of the Proposed Project that

scientifically significant fossils are located in the subsurface although their specific locations cannot be determined.

This analysis is based on a comparison of the amount of Proposed Project related ground surface disturbance in paleontologically sensitive geologic formations. The greater the disturbance in high sensitivity formations (PRSM High A and PRSM High B), the greater the potential for adverse impacts on scientifically significant fossils located in the subsurface. Conversely, lesser amounts of disturbance in high sensitivity geologic formations have a lower potential for adverse impacts on scientifically significant fossils located in the subsurface.

Construction-related disturbance of geologic formations (rocks and sediments) with paleontological potential could result in direct adverse impacts consisting of damage or destruction of scientifically significant paleontological resources located in the subsurface, and the loss of associated scientific information. As shown in Table 4.5-4 Paleontological Sensitivity Summary of the Proposed Project, based on the preliminary engineering of the Proposed Project, 5.7 miles of Segment 1 of the Proposed Project would affect geologic units of "High B" potential during Segment 1 of the Proposed Project related construction activities. An additional 1.7 miles of Segment 2 of the Proposed Project crosses geologic units with a "High A" sensitivity rating. As shown in Table 4.5-5 Paleontological Sensitivity Summary of Material Staging Yards for the Proposed Project, all associated material staging yards and access roads to these yards lie within units of "High B" sensitivity (approximately 11 acres), and any earthmoving of undisturbed sediments within these material staging yards would have the potential for direct impacts on paleontological resources during construction. SCE anticipates using one or more of the possible locations shown in Figure 3.6 Staging Yards and described in Table 3.2 Potential Staging Yard Locations as the material staging yard(s) for the Proposed Project. The material staging yards listed in Table 3.2 have been used by SCE or its contractors in the past. See Section 3.7.1.1, Staging Areas, for additional information on material staging yards.

Table 4.5-4 Paleontological Sensitivity Summary of the Proposed Project

Designation	Total Approximate Length (feet)	High A (feet)	High B (feet)	Low (feet)	Undetermined (Low)(feet)[1]
Segment 1 of the Proposed Project	65,413	0	30,051	33,969	1,393
Segment 2 of the Proposed Project	17,831	9,158	0	8,506	167

Note:

[1] During the paleontological survey and subsequent mapping, the undetermined sensitivity areas were determined to be moderate- to high-grade metamorphic rocks unlikely to contain fossils (Aron and Kelly, 2012).

Table 4.5-5 Paleontological Sensitivity Summary of Material Staging Yards for the Proposed Project

Designation	Total Size (acres)	High B (acres)	Low (acres)	Undetermined (Low) (acres)[1]
Material Staging Yard 1	2	2	0	0
Material Staging Yard 2	2	2	0	0
Material Staging Yard 3	2.4	2.4	0	0
Material Staging Yard 4	4.6	4.6	0	0
Material Staging Yard 5	N/A[2]	N/A	0	0
Material Staging Yard 6	N/A[2]	N/A	0	0

Note:

[1] During the paleontological survey and subsequent mapping, the undetermined sensitivity areas were determined to be moderate to high-grade metamorphic rocks unlikely to contain fossils. (Aron and Kelly, 2012).

[2] Material staging yard is located at an existing SCE facility. This material staging yard was included for the purposes of the environmental analysis.

The potential for construction-related indirect impacts is anticipated to be moderate because most of the Proposed Project area has a combination of "High B" and low paleontologic potential; in areas with "High A and High B" potential, no scientifically significant resources were observed on the surface; and no previously recorded fossil sites occur within the Proposed Project area. Therefore, some potential exists for construction to encounter paleontological resources beneath the surface. With incorporation of Applicant Proposed Measure (APM)-CUL-1 below, even if paleontological resources are encountered, impacts would be reduced to less than significant through implementation of a Paleontological Resources Management Plan.

Operation

Less Than Significant Impact. Since the Proposed Project's facilities are expected to have a less than significant impact on paleontological resources, O&M of those same facilities also is expected to have a less than significant impact.

The potential for indirect impacts in association with O&M is anticipated to be low because the types of work typical to O&M are anticipated to have a negligible impact on any remaining subsurface fossils after any mitigation during the construction phases. Although it is possible that additional fossils could erode onto the surface over time during the lifetime of the Proposed Project, they are not expected to erode out of the relatively flat-lying, populated areas, and would therefore be protected by virtue of the fact that they would be difficult to locate for the purpose of vandalism or unauthorized collection. Therefore, any impact would be less than significant.

4.5.9 Applicant Proposed Measures

4.5.9.1 Cultural and Paleontological Resources

4.5.9.1.1 Proposed Project

Because less than significant impacts are expected to occur to cultural resources for the Proposed Project, no APMs for such impacts are required. However, SCE is proposing the following APM to reduce paleontological resources impacts associated with the Proposed Project to less than significant:

APM CUL-1 – Impacts to sensitive paleontological resources would be reduced with implementation of a Paleontological Resources Management Plan.

4.5.9.1.2 Alternative Project

The following APM(s) would be implemented to reduce cultural and paleontological resources impacts associated with the Alternative Project as discussed below in the Alternative 2 Section:

APM CUL-ALT-1 – The Alternative Project impact to archaeological resources would be mitigated or reduced to a less than significant level by utilizing one or a combination of standard-practice scenarios, including but not limited to:

- Avoidance by design, preservation in place, or capping
- Reduction of area of direct impact/effect
- Data Recovery

APM CUL-ALT-2 – Impacts to sensitive paleontological resources would be reduced with implementation of a Paleontological Resources Management Plan.

4.5.10 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road

where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Segment 2 of Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

Alternative Project Cultural Resources Present-day Environmental Setting

The cultural resources survey identified 13 resources within the Alternative Project area where it differs from the Proposed Project, seven that were previously recorded resources and six that were newly identified. Of the resources, 10 are archaeological sites, two are historic isolates, and one is a prehistoric isolate. Of the archaeological sites, two are historic, seven are prehistoric, and one is multicomponent. The resources identified in the Alternative Project area are described in Table 4.5-6 Cultural Resources Identified in the Alternative Project Area.

Table 4.5-6 Cultural Resources Identified in the Alternative Project Area

Site Number/ Temporary Number	Site Type	Time Period	Site Description
Previously Recorded Resources			
CA-RIV-1074	Site	Prehistoric	Habitation site with bedrock milling, fire-affected rock, midden, rock shelters, ceramic shards, groundstone fragments, lithic debitage, burned bone
CA-RIV-7400	Site	Prehistoric	Single milling station with six milling slicks and one possible mortar
CA-RIV-8082	Site	Historic	Refuse scatter with three concentrations of historic glass and cans
CA-RIV-8083	Site	Prehistoric	Milling site containing a single milling element
CA-RIV-8749	Site	Prehistoric	Seven bedrock milling features with a total of 18 milling slicks with an associated lithic scatter
P-33-16989	Site	Prehistoric	Groundstone and lithic scatter
P-33-16990	Site	Multicomponent	Bedrock milling site and historic rock carving
Newly Identified Resources			
CA-RIV-10890	Site	Historic	Historic refuse scatter
CA-RIV-10892	Site	Prehistoric	Small lithic scatter
CA-RIV-10892	Site	Prehistoric	Small scatter of lithic debitage
Newly Identified Isolates			
P-33-21031	Isolate	Historic	Metal oil can
P-33-21032	Isolate	Historic	Aqua glass fragment.
P-33-023914	Isolate	Prehistoric	Metate fragment

Alternative Project Cultural Resources Impacts Analysis (Construction and Operation Impacts)

Based on preliminary analysis, it is highly likely (on a provisional basis) that construction and O&M impacts could be avoided for all of the known cultural resources except for CRHR-eligible historical resource CA-RIV-1074.

The Alternative Project could impact historical resource CA-RIV-1074 through pole installation and through O&M use of the two existing access roads across the site. The most problematic of these access roads is on the east, where public and private use since at least 1938 has cut deeply into an exposed midden deposit, but closing it (perhaps through geofabric capping, importation of archaeologically sterile soil, and revegetation with native species) would prevent Alternative Project related impacts. Most of the western access road, next to which the new poles would be installed, passes through an area that has been eroded down to regolith and bedrock. However, subsurface cultural deposits may be present at the northern and southern extremities of the western road's course through the site, where pole installation or O&M use of the road may cause an impact. As a result, construction or O&M impact on site CA-RIV-1074 would cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Section 15064.5. However, impacts to this resource would be reduced to less than significant with the implementation of APM CUL-ALT-1.

Alternative Project Paleontological Resources Impacts Analysis (Construction and Operation Impacts)

Construction-related disturbance of geologic formations (rocks and sediments) with paleontological potential could result in direct adverse impacts consisting of damage or destruction of scientifically significant paleontological resources and the loss of associated scientific information. As shown in Table 4.5-7 Paleontological Sensitivity Summary of the Alternative Project, based on Alternative Project preliminary design plans, approximately 7.4 miles of Segment 1 of the Alternative Project area would affect geologic units of "High B" potential during Alternative Project related construction activities. An additional 1.7 miles of Segment 2 of the Alternative Project area crosses geologic units with a "High A" sensitivity rating. As shown in Table 4.5-8 Paleontological Sensitivity Summary of Material Staging Yards for the Alternative Project, all associated materials staging yards and access roads to these yards lie within units of "High B" sensitivity (approximately 11 acres), and any earthmoving of undisturbed sediments within these yards would have the potential for direct impacts on paleontological resources during construction.

Table 4.5-7 Paleontological Sensitivity Summary of the Alternative Project

Designation	Total Approximate Length (feet)	High A (feet)	High B (feet)	Low (feet)	Undetermined (Low) (feet)[1]
Segment 1 of the Alternative Project	78,380	0	38,943	38,341	1,096
Segment 2 of the Alternative Project	26,386	9,158	0	13,226	4,002

Note:

[1] During the paleontological survey and subsequent mapping, the undetermined sensitivity areas were determined to be moderate to high-grade metamorphic rocks unlikely to contain fossils (Aron and Kelly 2012).

Table 4.5-8 Paleontological Sensitivity Summary of Material Staging Yards for the Alternative Project

Designation	Total Size (acres)	High B (acres)	Low (acres)	Undetermined (Low) (acres)[1]
Material Staging Yard 1	2	2	0	0
Material Staging Yard 2	2	2	0	0
Material Staging Yard 3	2.4	2.4	0	0
Material Staging Yard 4	4.6	4.6	0	0
Material Staging Yard 5	N/A[2]	N/A	0	0
Material Staging Yard 6	N/A[2]	N/A	0	0

Note:

[1] During the paleontological survey and subsequent mapping, the undetermined sensitivity areas were determined to be moderate to high-grade metamorphic rocks unlikely to contain fossils (Aron and Kelly, 2012).

[2] Material staging yard is located at an existing SCE facility. This material staging yard was included for the purposes of the environmental analysis.

In general, the potential for construction-related indirect impacts is anticipated to be moderate because most of the Alternative Project area has a combination of High B and low paleontologic potential, and in areas with "High A" and "High B" potential, no scientifically significant resources were observed on the surface. Few, if any, additional scientifically significant fossils are expected to remain on the ground surface within the Alternative Project area.

With the implementation of APM CUL-ALT-2 for any known fossil sites and unknown subsurface fossil sites, potential adverse impacts on paleontological resources within the Alternative Project area would be reduced or avoided, and adverse impacts on fossils on the

ground surface from Alternative Project related ground-disturbing actions would be less than significant.

Since the Alternative Project's facilities are expected to have a less than significant impact on paleontological resources if APM CUL-ALT-2 is implemented, O&M of those same facilities also is expected to have a less than significant impact if APM CUL-ALT-2 is implemented. The potential for indirect impacts in association with O&M is anticipated to be low because the types of work typical to O&M are anticipated to have a negligible impact on any remaining subsurface fossils after any mitigation during the construction phases. Although it is possible that additional fossils could erode onto the surface over time during the lifetime of the Alternative Project, they are not expected to erode out of the relatively flat-lying, populated areas, and would therefore be protected by virtue of the fact that they would be difficult to locate for the purpose of vandalism or unauthorized collection. Therefore, any impact would be less than significant, particularly when the Paleontological Resources Management Plan is implemented.

4.5.11 References

Anderson, R. S., M. J. Power, S. J. Smith, K. B. Springer, and E. Scott. 2002. Paleoecology of a Middle Wisconsin Deposit from Southern California. *Quaternary Research* 58(3):310–317.

Aron, G. L., and Kelly, J. C. 2012. *Confidential Paleontological Survey Report: Southern California Edison, Valley South Subtransmission Project* (VSSP). On file at Paleo Solutions. Monrovia, CA.

Aron, G. L., S. A. Siren, and Kelly, J. C. 2014. *Confidential Paleontological Survey Report: Southern California Edison, Valley South Subtransmission Project* (VSSP). On file at Paleo Solutions. Monrovia, CA.

Bean, L. J. 1978. Cahuilla. In *California*, edited by R.F. Heizer, pp. 575–587. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor. Smithsonian Institution, Washington DC.

Bean, L. J., and F. C. Shipek. 1978. Luiseño. In *California*, edited by R.F. Heizer, pp. 550–563. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

Bean, L. J., and C. Smith. 1978. Gabrielino. In *California*, edited by R.F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bean, L. J., and S. B. Vane (editors). 1979. *Native Americans of Western Riverside County California and the Devers-Mira Loma 500kV Transmission Line Route (Lamb-Canyon-Mira Loma Section)*. Prepared by Cultural Systems Research Inc., Menlo Park, CA, for Southern California Edison Company, Rosemead, CA.

Bean, L. J., and S. B. Vane (editors). 1980. *The Ethnography and History of the Devers to Lamb Canyon Transmission Corridor Area, Riverside County, California.* Prepared by Cultural Systems Research, Inc., Menlo Park, CA, for Southern California Edison Company, Rosemead CA.

Bean, L. J., S. B. Vane, and J. Young. 1991. *The Cahuilla Landscape: The Santa Rosa and San Jacinto Mountains.* Menlo Park, CA: Ballena Press.

Beedle, P. 2005. DPR site form for CA-RIV-8196/P-33-15743. Form on file at the Eastern Information Center, Riverside, CA.

Bettinger, R. L. 1974. Dating the Perris Reservoir Assemblages. In *Perris Reservoir Archaeology,* edited by J. F. O'Connell, P. J. Wilke, T. F. King, and C. L. Mix, pp. 159–162. California Department of Parks and Recreation Reports No. 14. Sacramento.

Bolton, H. E. 1930. Anza's California Expeditions. Volume 3. Berkeley, CA: University of California Press.

Boyce, M. A. 1995. *Murrieta—Old Town, New Town: A Community History.* Murrieta, CA: Rosemar Pub.

Boyer, P. S. 2001. Route 66. In *The Oxford Companion to United States History*. Oxford University Press. Available: http://www.encyclopedia.com/doc/1O119-Route66.html. Accessed April 29, 2012.

Brigandi, P. 1999. The Outposts of Mission San Luis Rey. *Journal of San Diego History* 45(2):106–112.

———. 2000. Building the Future: The Story of the Eastern Municipal Water District. Perris, CA: Eastern Municipal Water District.

Bull, C. S. 1983. Shaking the Foundations: The Evidence for San Diego Prehistory. *Cultural Resource Management Casual Papers 1:15–64.* Department of Anthropology, San Diego State University, San Diego, CA.

Bynon, A. A. 1992. *History and Directory of Riverside County 1893–1894*. Reprinted from 1893. Riverside, CA: Historical Commission Press.

Carter, G. F. 1957. *Pleistocene Man at San Diego*. Baltimore, MD: Johns Hopkins Press.

City of Menifee. 2013. City of Menifee General Plan – Open Space and Conservation Element. Available: http://www.cityofmenifee.us/index.aspx?NID=250. Accessed April 2014.

City of Murrieta. 2001. Title 16: Development Code. Cultural Resource Preservation. Available: http://www.murrieta.org/cityhall/cd/planning/devcode.asp. Accessed January 2013.

———. 2011. General Plan Update. Available: http://www.murrieta.org/cityhall/cd/planning/docs/general.asp. Accessed January 30, 2013.

City of Perris. 2005. General Plan. Conservation Element. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed January 29, 2013.

———. 2007. Perris History. Available: http://www.cityofperris.org/about/history.html. Accessed April 2012.

City of Temecula. 2005. General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014.

CRM Tech. 2003. *Archaeological Mitigation and Data Recovery Report, Newport Road Extension Project, near the Community of Winchester, Riverside County, California*. On file, Eastern Information Center, University of California, Riverside.

———. 2004. *Archaeological Mitigation and Data Recovery Report, Newport Road Extension Project, near the Community of Winchester, Riverside County, California*. On file, Eastern Information Center, University of California, Riverside.

Ezell, P. 1987. The Harris Site: An Atypical San Dieguito Site, or Am I Beating a Dead Horse? In *San Dieguito-La Jolla: Chronology and Controversy*, edited by D. Gallegos, pp. 15-22. San Diego County Archaeological Society Research Paper Number 1.

Fowler, Mrs. F. H. 1912. The San Jacinto Valley. In *History of Riverside County, California.* Historic Record Company, Los Angeles, pp. 218–252.

Gallegos, D. 1985. *Batiquitos Lagoon Revisited.* Cultural Resource Management Casual Papers 2(1). Department of Anthropology, San Diego State University, CA.

———. 1987. *San Dieguito-La Jolla: Chronology and Controversy*. San Diego County Archaeological Society, Research Paper 1. San Diego, CA.

———. 1991. Antiquity and Adaptation at Agua Hedionda, Carlsbad, California. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J. M. Erlandson and R. H. Colten, pp. 19–42. Perspectives in California Archaeology, Vol. 1, J. E. Arnold, series editor. Institute of Archaeology, University of California, Los Angeles.

Garrison, A. V. 1963. My Children's Home—A History of Murrieta, California. Published by the author. On file at the Perris Library, Perris, CA.

Goldberg, S. 2001. Land Use, Mobility, and Intensification Evaluation and Refinement of the Model. In *Metropolitan Water District of Southern California, Eastside Reservoir Project, Final Report of Archaeological Investigations, Volume IV: Prehistoric Archaeology Synthesis of Findings*, edited by S. K. Goldberg, Chap. 14. Report prepared by Applied Earthworks, Hemet, California for Metropolitan Water District of Southern California, Los Angeles.

Golla, V. 2007. Linguistic Prehistory. In *California Prehistory: Colonization, Culture, and Complexity,* edited by T. L. Jones, and K. A. Klar, pp. 71–82. New York: AltaMira Press.

Grenda, D. R. 1997. *Continuity & Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore*. Statistical Research Technical Series 59, Tucson, AZ.

Gudde, E. G. 1969. *California Place Names: The Origin and Etymology of Current Geographical Names.* Second edition. Berkeley: University of California Press.

Gunther, J. D. 1984. *Riverside County, California Place Names: Their Origins and Their Stories*. Riverside, CA: Rubidoux Printing.

Hamilton, M. C., and J. George. 2009. DPR site form for CA-RIV-8196/P-33-15743. Form on file at the Eastern Information Center, Riverside, CA.

Hanson, B. 1998. California Southern-Santa Fe: The San Jacinto Valley Railway. Unpublished pamphlet. City of Riverside Public Library Archives, Riverside, CA.

Helmich, M. A. 2008. The Butterfield Overland Mail Company. California State Parks, Interpretation and Education Division.

Hogan, M., B. Tang, and M. Dahdul. 2004. *Archaeological Testing at Winchester Valley 85, Tract No. 30806, APNs 461-190-041, -048 to -050, near the Community of Winchester, Riverside County, California*. Report on file, Eastern Information Center, University of California, Riverside, CA.

Holmes, E. W. 1912. *History of Riverside County, California.* Los Angeles, CA: Historic Record Company.

Hudson, T. 1978. *Lake Elsinore Valley, Its Story 1776-1997*. Lake Elsinore, CA: Mayhall Print Shop.

Hudson, T. 1990. "Pleasant Valley." Unpublished paper. City of Riverside Public Library Archives, Riverside, CA.

Jones, T. L., G. M. Brown, L. M. Raab, J. L. McVicker, W. G. Spaulding, D. L. Kent, A. York, and P. Walker. 1999. Environmental Imperatives Reconsidered. Demographic Crises in Western North America during the Medieval Climatic Anomaly. *Current Anthropology* 40:137–170.

Kennett, D. J., and J. P. Kennett. 2000. Competitive and Cooperative Responses to Climatic Instability in Coastal Southern California. *American Antiquity* 65:379–395.

Koerper, H. C., P. E. Langenwalter II, and A. Schroth. 1991. Early Holocene Adaptations and the Transition Phase Problem: Evidence from the Allan O. Kelly Site, Agua Hedionda Lagoon. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J. M. Erlandson and R. H. Colton, pp. 43–62. Perspectives in California Archaeology, Vol. 1, J. E. Arnold, series editor. Institute of Archaeology, University of California, Los Angeles.

Kroeber, A. L. 1907. Shoshonean Dialects of California. *University of California Publications in American Archaeology and Ethnology* 4(3):66–165.

———. 1925. *Handbook of the Indians of California*. American Bureau of Ethnology Bulletin 78. Washington, DC.

Lech, S. 2004. *Along the Old Roads: A History of the Portion of Southern California that Became Riverside County, 1772–1893*. Steve Lech, Riverside, CA.

McKenna, Jeanette. 2003. *A Phase II Archaeological Testing Program at CA-RIV-3839, a Prehistoric Milling Station in the French Valley Region of Riverside County*. Prepared by McKenna et al., Whittier, California for Monteleone Real Estate, Murrieta, California. McLeod, S.A. 2013. Paleontological Resources for the Proposed Valley Subtransmission

Line Project, Riverside County, Project Area. Unpublished letter report by the Natural History Museum of Los Angeles County, dated 27 December 2013.

Menifee Valley Historical Association. 2006. *Images of America: Menifee Valley,* Charleston, SC*:* Arcadia Publishing.

Miller, W. R. 1986. Numic Languages. In *Great Basin*, edited by W. L. D'Azevedo, pp. 98–112. Handbook of the North American Indians, Vol. 11. W.C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

Moratto, M. J. 1984. *California Archaeology*. Academic Press.

Moriarty III, J. R. 1987. A Separate Origins Theory for Two Early Man Cultures in California. In *Dieguito-La Jolla: Chronology and Controversy*, edited by D. Gallegos, pp. 49–60. San Diego County Archaeological Society, Research Paper 1.

Moriarty III, J. R., and H. Minshall. 1972. A New Pre-desert Site Discovered near Texas Street. *Anthropological Journal of Canada* 10(3):10–13.

Morton, D. M., and F. K. Miller. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California, with digital data preparation by Cossette, P. M., and Bovard, K. R. United States Geological Survey Open-File Report 2006:1217. Available: http://pubs.usgs.gov/of/2006/1217/. Accessed October 2012.

Norris, R. N., and R. W. Webb. 1976. Peninsular Ranges. In *Geology of California*. New York: Wiley and Sons.

Perez, C. 1982. Grants of Land in California Made by Spanish or Mexican Authorities. Boundary Determination Office, State Lands Commission, Boundary Investigation Unit. Updated: April 16, 2007. Available: http://www.lib.berkeley.edu/ EART/rancho.html. Accessed: May 29, 2009.

Riverside County. 2008. *General Plan–2008 Update, Multipurpose Open Space Element*.

Robinson, J. W. 1989. *The San Bernardinos.* Arcadia, CA: Big Santa Anita Historical Society.

Robinson, M. C. 2001. Units of Analysis. In *Metropolitan Water District of Southern California, Eastside Reservoir Project, Final Report of Archaeological Investigations, Volume IV: Prehistoric Archaeology Synthesis of Findings*, edited by S. K. Goldberg, Chapter 4. Prepared by Applied Earthworks, Hemet, California for Metropolitan Water District of Southern California, Los Angeles.

Rolle, A. F. 1963. *California: A History.* New York: Thomas Y. Crowell Company.

Schaefer, J. 1994. The Challenge of Archaeological Research in the Colorado Desert: Recent Approaches and Discoveries. *Journal of California and Great Basin Anthropology* 16(1):60–80.

Scott, E. 2010. Extinctions, Scenarios, and Assumptions: Changes in Latest Pleistocene Large Herbivore Abundance and Distribution in Western North America. In *Faunal Dynamics and Extinction in the Quaternary: Papers Honoring Ernest L. Lundelius, Jr.*, eds. E. Scott and G. McDonald. *Quaternary International* 217:225–239.

———. 2012. Paleontological records search for Valley South Subtransmission Project at San Bernardino County Museum, Redlands, CA.

———. 2013. Paleontological records search for Valley South Subtransmission Project at San Bernardino County Museum, Redlands, CA.

Springer, K., E. Scott, J. C. Sagebiel, and L. K. Murray. 2009. The Diamond Valley Lake local fauna: late Pleistocene vertebrates from inland southern California. *In* L.B. Albright III (ed.), Papers on geology, vertebrate paleontology, and biostratigraphy in honor of Michael O. Woodburne. *Museum of Northern Arizona Bulletin* 65:217-235.

———. 2010. Late Pleistocene large mammal faunal dynamics from inland southern California: the Diamond Valley Lake local fauna. *In* E. Scott and G. McDonald (eds.), Faunal dynamics and extinction in the Quaternary: papers honoring Ernest L. Lundelius, Jr. *Quaternary International* 217:256-265.

Stine, S. 1994. Extreme and Persistent Drought in California and Patagonia during Mediaeval Time. *Nature* 369:546–549.

Sutton, M. Q. 2009. People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly* 41(2&3):31-93.

Sutton, M. Q., M. E. Basgall, J. K. Gardner, and M. W. Allen. 2007. Advances in Understanding Mojave Desert Prehistory. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 229–245. Alta Mira Press.

Wallace, W. J. 1955. Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230.

Ward, J. W. 1967. *The Cahuilla: A Historical-Anthropological Study of a Southern California People*. Los Angeles, CA.

Warren, C. N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, pp. 1–14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Warren, C. N., G. Siegler, and F. Dittmer. 1998. Paleo-Indian and Early Archaic Periods. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Draft report prepared by ASM Affiliates and submitted to Metropolitan Wastewater, San Diego. Draft Cultural Resources Inventory—Proposed SCE Devers Substation to Valley Substation Project 126

Weingroff, R. 1996. *Public Roads.* United States Department of Transportation and the Federal Highway Administration.

Wilke, P. 1974. Settlement and Subsistence at Perris Reservoir: A Summary of Archaeological Investigations. In *Perris Reservoir Archaeology,* edited by J. F. O'Connell, P. J. Wilke, T. F. King, and C. L. Mix, pp. 20–30. California Department of Parks and Recreation Reports No. 14. Sacramento.

———. 1978. *Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California*. Contributions of the University of California Archaeological Research Facility 38. University of California, Berkeley.

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Section 4.6
Geology and Soils

4.6 Geology and Soils

This section describes geology and soils in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.6.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.6.1.1 Regional Geology

The Proposed Project is located within the Peninsular Ranges geomorphic province of California, which consists of a series of mountain ranges separated by northwest trending valleys parallel to branch faulting linked to the San Andreas Fault. The geology of the region is similar to the Sierra Nevada Mountains, with granitic rock intruding into the older metamorphic rocks. The Peninsular Ranges geomorphic province extends south from the Transverse Ranges geomorphic province north of Los Angeles, over 1,400 kilometers into Mexico where it forms the Baja Peninsula (California Geological Survey [CGS], 2002; Morton & Miller, 2006).

The Proposed Project is located on a local geomorphic feature of the province termed the Perris Block, an area approximately 25 miles wide bounded on the northeast by the active San Jacinto Fault and the active Elsinore Fault to the southwest. The Perris Block is a roughly rectangular shaped block of relatively low relief underlain by granitic and metamorphic rocks of the

Southern California Batholith (Morton & Miller, 2006). Granitic and metamorphic rocks of the Southern California Batholith exposed on the Proposed Project area are Mesozoic in age (250 to 65 million years before present [B.P.]).

Drainage courses on the batholith surface are partially filled with alluvial deposits and the Proposed 115 kV subtransmission line crosses portions of Perris, Menifee, Domenigoni, Paloma, and French valleys. In general, the subtransmission corridor is within the relatively flat, alluvial-filled valley areas, but skirts the margins and crosses several low-moderate relief bedrock hills. Alluvial sediments that would be encountered by the Proposed Project are Pleistocene (1.6 million to 11,000 years B.P.) and Holocene (11,000 B.P.) in age (CDC, 2007b).

A description of the deposits and their ages is summarized in Table 4.6-1 Summary of Surficial and Bedrock Geologic Units along the Proposed 115 kV Subtransmission Line. A geologic map showing the Proposed Project is provided on Figure 4.6-1 Geologic Map.

Table 4.6-1 Summary of Surficial and Bedrock Geologic Units along the Proposed 115 kV Subtransmission Line

Formation or Feature	Age	Description	Potential Excavation Characteristics[1]
Qyaa	Holocene to Late Pleistocene	Young Alluvial Fluvial channel deposits along valley floors. Consists of unconsolidated sand, silt, and clay-bearing alluvium.	Easy to Moderate
Qyvsa	Holocene to Late Pleistocene	Young alluvial valley deposits, silt or silty sand, arenaceous – Fluvial deposits along valley floors. Consists of unconsolidated sand, silt, and clay –bearing alluvium.	Easy to Moderate
Qofa	Holocene to Late Pleistocene	Old alluvial fan deposits, arenaceous – Reddish brown, gravel and sand alluvial fan deposits; indurated, commonly slightly dissected. In places, includes thin alluvial fan deposits of Holocene age.	Easy to Moderate
Qofb	Late to Middle Pleistocene	Old Alluvial Fan deposits, boulder gravel – Reddish brown, gravel and sand alluvial fan deposits; indurated, commonly slightly dissected.	Easy to Moderate
Qvofg	Late to Middle Pleistocene	Very Old alluvial fan deposits - Mostly well-dissected, well-indurated, reddish-brown alluvial fan deposits.	Easy to Moderate

Formation or Feature	Age	Description	Potential Excavation Characteristics[1]
Qvofa	Middle to Early Pleistocene	Very old alluvial channel and valley deposits, arenaceous - Fluvial sediments deposited on broad canyon floors. Consists of moderately to well-indurated, reddish-brown, mostly very dissected gravel, sand, silt, and clay-bearing alluvium.	Easy to Moderate
Qvova	Middle Pleistocene	Very old alluvial channel deposits, arenaceous – Fluvial sediments deposited on valley floors. Consists of moderately to well-indurated, reddish-brown, mostly very dissected gravel, sand, silt, and clay-bearing alluvium. In places, includes thin, discontinuous alluvial deposits of Holocene age.	Easy to Moderate
Qvoaa	Middle to Early Pleistocene	Fluvial sediments deposited-arenaceous on broad canyon floors. Consists of moderately to well-indurated, reddish-brown, mostly very dissected gravel, sand, silt, and clay-bearing alluvium. In places, includes thin, discontinuous alluvial deposits of Holocene age.	Easy to Moderate
QTsw	Late Pleistocene	Sandstone and conglomerate of Wildomar area; consisting primarily of friable, pale yellowish-green, medium-grained, caliche-rich sandstone.	Easy to Moderate
Qpfs	Pleistocene	Sandstone member of Pauba Formation; The Pauba Formation largely consists of well-indurated sandstone containing sparse cobble-to boulder conglomerate beds. It is eroded into gentle badlands topography in most of its extent. Remnants of scattered, discontinuous alluvial deposits suggest the Pauba Formation was covered by relatively thin younger Pleistocene sediments.	Easy to Moderate

Formation or Feature	Age	Description	Potential Excavation Characteristics[1]
Kdvg	Cretaceous	Relatively Uniform, massive hornblende biotite grandodiorite grading into tonalite. Principal rock type of Domenigoni Valley pluton. Contains some mafic rich rocks in southern part of pluton. Small masses of epidote and/or tourmaline rock occur locally and appear to replace grandodiorite to tonalite. Contains moderately abundant to abundant equant mafic inclusions.	Difficult
Kgb	Cretaceous	Gabbro – Mainly hornblende gabbro. Includes San Marcos gabbro of Larsen (1948). Typically brown-weathering, medium-to very coarse-grained hornblende gabbro; very large poikilitic hornblende crystals are common, and very locally gabbro is pegmatitic. Much is quite heterogeneous in composition and texture. Includes noritic and dioritic composition rock.	Difficult
Kgd	Tertiary - Eocene	Cenozoic (Tertiary) plutonic rocks including undifferentiated Biotite granodiorite.	Difficult
Kpvt	Late Cretaceous	Tonalite-Foliated biotite – hornblende tonalite. In eastern part of complex grades into tonalite.	Difficult
Kpvg	Cretaceous	Monzogranite to granodiorite of the Paloma Valley Ring Complex – pale gray, massive, medium-grained hypidiomorphic-granular biotite monzogranite, and less abundant hornblende-biotite grandodiorite forming older ring dike. Contains inclusions of small to large blocks of grabbo.	Difficult
Kt	Cretaceous	Undifferentiated 'Tonalite, of the Peninsular Ranges,' composite of two batholiths. The emplacement of igneous rocks took place during a single sequence of magmatic activity.	Difficult
Mzq	Mesozoic	Quartz Rich Metamorphic Rock- Metaigneous rocks, undifferentiated - Wide variety of low- to medium-metamorphic grade meta-igneous rocks.	Moderate to Difficult

Formation or Feature	Age	Description	Potential Excavation Characteristics[1]
Mzu	Mesozoic	Metasedimentary rocks, undifferentiated – Wide variety of low-to medium-metamorphic grade metasedimentary rocks. 'Within the Santa Ana Mountains rocks are of low grade, greenschist or lower grade. Most of the eastern occurrences include biotite schist.	Moderate to Difficult

Note:

[1] Excavation characteristics are very generally defined as "easy," "moderate," or "difficult," based on increasing hardness of the rock unit. Excavation characteristic descriptions are general in nature and the actual ease of excavation may vary widely depending on site-specific subsurface conditions. Actual excavation characteristics for each geological unit may vary widely, depending on site-specific subsurface conditions, which must be determined by site-specific geophysical surveys and geotechnical sampling, testing, and analysis.

Source: CGS, 1993, 1996, 2001

4.6.1.2 Faults

Southern California is a geologically complex and diverse area, dominated by the compressional and extensional forces created as the North American and Pacific tectonic plates slide past one another along a large transform fault known as the San Andreas. Regional tectonic forces have created a variety of faults within the crust to accommodate the compressional and extensional strain, allowing one rock mass to move relative to another rock mass. As a result, earthquakes are produced from the sudden movements along these faults, generating ground motion as the accumulated stress within the rocks is released as waves of seismic energy.

Faults are classified by the state based on their activity for use in the Alquist-Priolo (AP) Earthquake Fault Zoning Program. Faults classified as active are those that have been determined to be "sufficiently active and well defined," with evidence of surface displacement within Holocene time (about the last 11,000 years). Active faults have the potential for surface fault rupture hazards. A fault is deemed sufficiently active if evidence of Holocene surface displacement exists along one or more of its segments or branches. A fault is considered well-defined if its trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. Faults classified as potentially active displace Quaternary age deposits (last 1.6 million years). To a lesser degree, potentially active faults also represent possible surface rupture hazards. In contrast to active or potentially active faults, faults considered inactive have not moved in the last 1.6 million years (Bryant and Hart, 2007). A list of defined active and potentially active faults within approximately 33 miles of the Proposed Project are presented in Table 4.6-2 Defined Active and Potentially Active Faults within 33 miles of the Proposed Project; a regional fault map showing the approximate location relative to potential seismic sources is presented in Figure 4.6-2a Regional Faults.

Table 4.6-2 Defined Active and Potentially Active Faults within 33 miles of the Proposed Project

Fault Name	Distance in Miles (kilometers)[1]	Direction from Site	Estimated Maximum Earthquake Magnitude (Mw)*	MCE*
South Segment San Jacinto	~8 (13)	E-NE	4.1	7.2
Elsinore (Active)	~4 (6.4)	NW-SW	6.0	7.5
Banning	~23 (36.8)	NE	6.0	8.0
Crafton Hills	~22 (35.2)	N	4.5	5.4
Chino	~17 (27.2)	NW	6.5[2]	6.7
San Andreas-San Bernardino	~30 (50)	N	8.0	8.2
Wilson Creek	~33 (52.8)	NE	8.0	N/A
Hot Springs	~20 (32)	E	6.0	7.0
Wildomar	~3.5 to 5.5 (5.5 to 9)	W–SW	N/A	N/A
Warm Springs	~2.5 (4)	W	N/A	N/A
Santa Gertrudis	~1 (1.6)	E-SE	N/A	N/A
Willard	~6 (10)	W–SW	N/A	N/A
Coal Canyon	~7.5 (12)	W	N/A	N/A
Murrieta Hot Springs	0	S-SW	N/A	N/A

Notes:

*Acronyms: MCE = Maximum Credible Earthquake; Mw = Moment Magnitude; N/A = Not Available

Only the Elsinore fault is classified as an active fault. All other faults listed are Potentially Active faults.

[1] Distances are measured from the closest part of the Proposed 115 kV subtransmission line to the closest trace of the fault zone.

[2] The magnitude of an earthquake for this fault ranges between 6.5 and 7.0 Mw.

Source: United States Geological Survey 2013

The closest defined active fault to the Proposed Project is the Elsinore Fault Zone, located approximately 4 miles southwest of the Proposed Project area. It has the potential to produce a maximum credible earthquake magnitude of 7.5. Proposed Project vicinity faults are shown in Figure 4.6-2b Faults within the Vicinity of the Proposed Project. The Murrieta Hot Springs Fault is inferred to intersect the southern portion of Segment 2 of the Proposed Project, approximately 1 mile north of the Terminal TSP. No other fault traces cross the Proposed Project.

4.6.1.3 Seismicity

Seismic events on any of the active or potentially active faults can cause strong ground shaking, surface fault rupture, or liquefaction in susceptible areas. Seismic Risk Zones have been developed, based on the known distribution of historic earthquake events, evidence of past earthquakes, proximity to earthquake areas and active faults, and frequency of earthquakes in a given area. These zones are generally classified using either the CGS (formerly California Division of Mines and Geology) Maximum Expected Earthquake Intensity Map or the Uniform Building Code Seismic Risk Map of the United States. CGS provides guidance with regard to seismic hazards. Under the CGS Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments for planning and development purposes. The intent of this publication is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other types of ground failures, and other hazards caused by earthquakes. CGS Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for evaluation and mitigation of earthquake-related hazards for projects with designated zones of required investigations (CGS, 2008).

4.6.1.4 Soils

Several soil types are present within the Proposed Project area. The soils are within the Castaic-Balcom Soil association. These soils are derived from deposits of the sediment and alluvial materials, primarily from the erosion of intrusive granitic rocks, metamorphic schist, slates, and sedimentary sandstone and shale rocks originating from the nearby mountains.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.6-1

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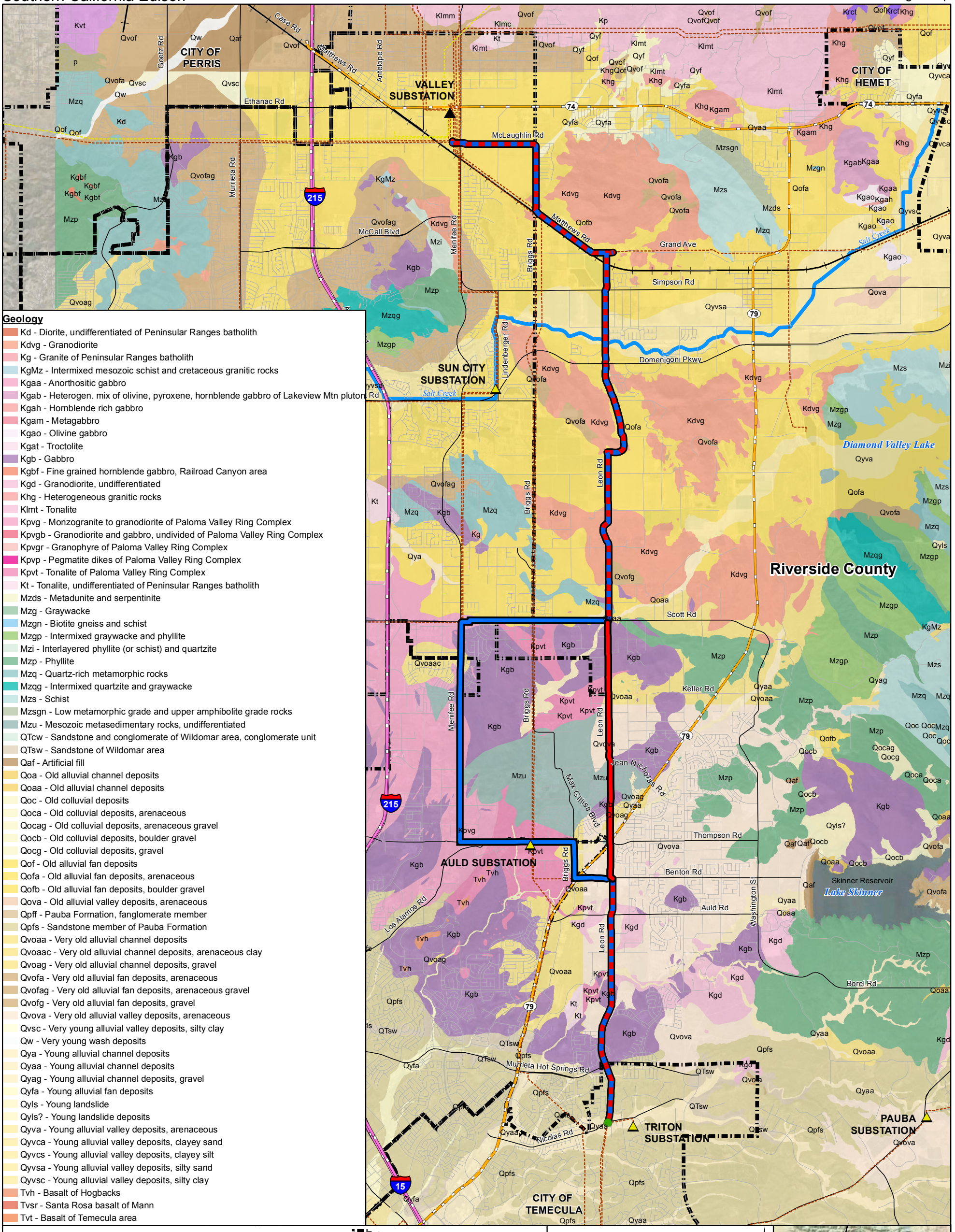
Geologic Map



Geology

- Kd - Diorite, undifferentiated of Peninsular Ranges batholith
- Kdvg - Granodiorite
- Kg - Granite of Peninsular Ranges batholith
- KgMz - Intermixed mesozoic schist and cretaceous granitic rocks
- Kgaa - Anorthositic gabbro
- Kgab - Heterogen. mix of olivine, pyroxene, hornblende gabbro of Lakeview Mtn pluton
- Kgah - Hornblende rich gabbro
- Kgam - Metagabbro
- Kgao - Olivine gabbro
- Kgat - Troctolite
- Kgb - Gabbro
- Kgbf - Fine grained hornblende gabbro, Railroad Canyon area
- Kgd - Granodiorite, undifferentiated
- Khg - Heterogeneous granitic rocks
- Klmt - Tonalite
- Kpvg - Monzogranite to granodiorite of Paloma Valley Ring Complex
- Kpvgb - Granodiorite and gabbro, undivided of Paloma Valley Ring Complex
- Kpvgr - Granophyre of Paloma Valley Ring Complex
- Kpvp - Pegmatite dikes of Paloma Valley Ring Complex
- Kpvt - Tonalite of Paloma Valley Ring Complex
- Kt - Tonalite, undifferentiated of Peninsular Ranges batholith
- Mzds - Metadunite and serpentinite
- Mzg - Graywacke
- Mzgn - Biotite gneiss and schist
- Mzgp - Intermixed graywacke and phyllite
- Mzi - Interlayered phyllite (or schist) and quartzite
- Mzp - Phyllite
- Mzq - Quartz-rich metamorphic rocks
- Mzqg - Intermixed quartzite and graywacke
- Mzs - Schist
- Mzsgn - Low metamorphic grade and upper amphibolite grade rocks
- Mzu - Mesozoic metasedimentary rocks, undifferentiated
- QTcw - Sandstone and conglomerate of Wildomar area, conglomerate unit
- QTsw - Sandstone of Wildomar area
- Qaf - Artificial fill
- Qoa - Old alluvial channel deposits
- Qoaa - Old alluvial channel deposits
- Qoc - Old colluvial deposits
- Qoca - Old colluvial deposits, arenaceous
- Qocag - Old colluvial deposits, arenaceous gravel
- Qocb - Old colluvial deposits, boulder gravel
- Qocg - Old colluvial deposits, gravel
- Qof - Old alluvial fan deposits
- Qofa - Old alluvial fan deposits, arenaceous
- Qofb - Old alluvial fan deposits, boulder gravel
- Qova - Old alluvial valley deposits, arenaceous
- Qpff - Pauba Formation, fanglomerate member
- Qpfs - Sandstone member of Pauba Formation
- Qvoaa - Very old alluvial channel deposits
- Qvoaac - Very old alluvial channel deposits, arenaceous clay
- Qvoag - Very old alluvial channel deposits, gravel
- Qvofa - Very old alluvial fan deposits, arenaceous
- Qvofag - Very old alluvial fan deposits, arenaceous gravel
- Qvofg - Very old alluvial fan deposits, gravel
- Qvova - Very old alluvial valley deposits, arenaceous
- Qvsc - Very young alluvial valley deposits, silty clay
- Qw - Very young wash deposits
- Qya - Young alluvial channel deposits
- Qyaa - Young alluvial channel deposits
- Qyag - Young alluvial channel deposits, gravel
- Qyfa - Young alluvial fan deposits
- Qyls - Young landslide
- Qyls? - Young landslide deposits
- Qyva - Young alluvial valley deposits, arenaceous
- Qyvca - Young alluvial valley deposits, clayey sand
- Qyvcs - Young alluvial valley deposits, clayey silt
- Qyvsa - Young alluvial valley deposits, silty sand
- Qyvsc - Young alluvial valley deposits, silty clay
- Tvh - Basalt of Hogbacks
- Tvsr - Santa Rosa basalt of Mann
- Tvt - Basalt of Temecula area

Proposed Project

- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project

- Alternative 115 kV Subtransmission Line

Existing Facilities

- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

City Boundary

Sources: SCE, 2014; Riverside County, 2014; USGS Mineral Resources, 2005
Aerial Image: Google Earth Pro, 2014

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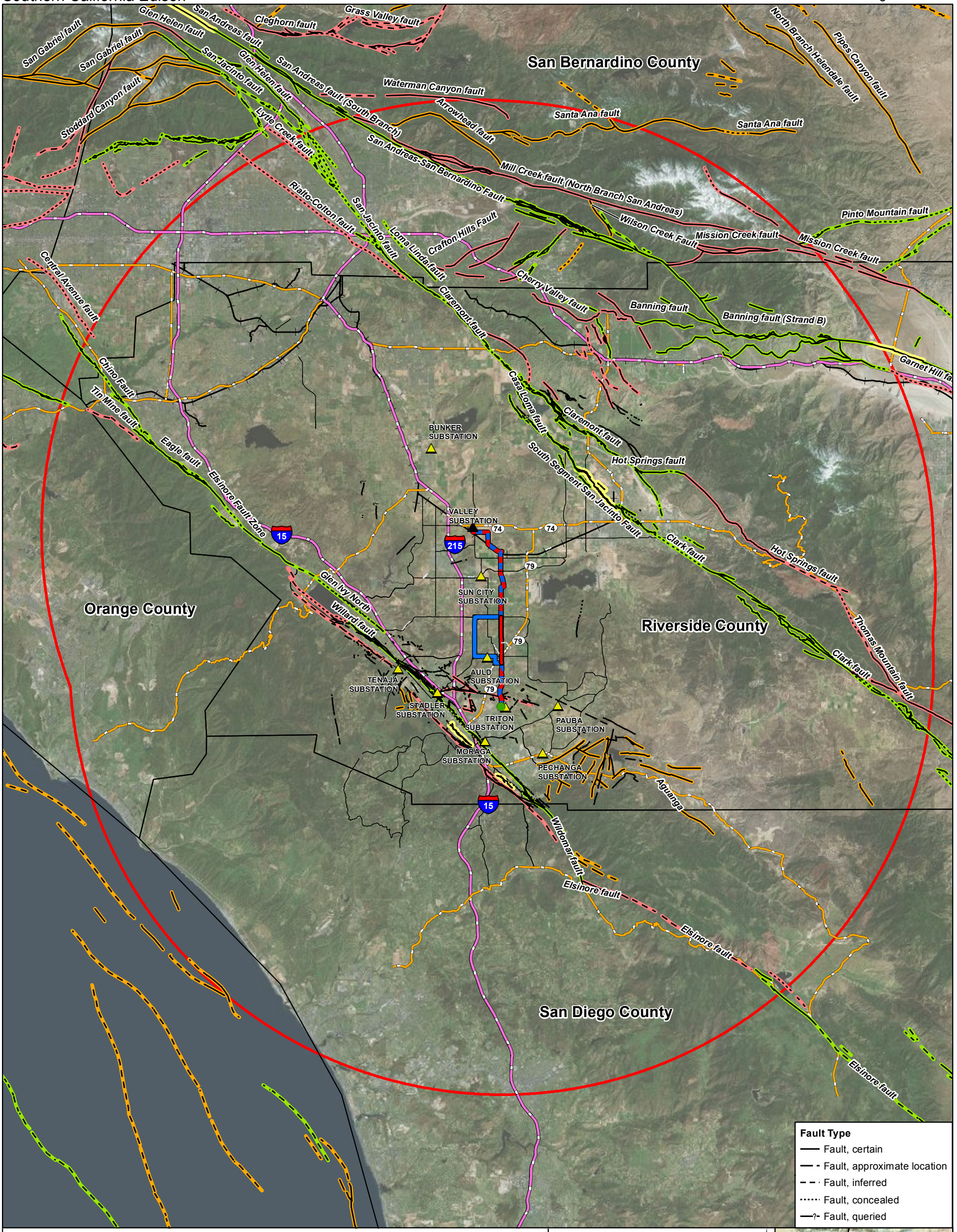
VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.6-2a**

Southern California Edison Regional Faults



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line
- 33 Mile Distance from Proposed Project

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP

California Geologic Survey Faults

Active Faults
- Historic
- Holocene

Potentially Active Faults
- Late Quaternary
- Quaternary

Sources: SCE, 2014; Riverside County, 2014; California Geologic Survey, 2005
Aerial Image: Provided by ESRI, 2014

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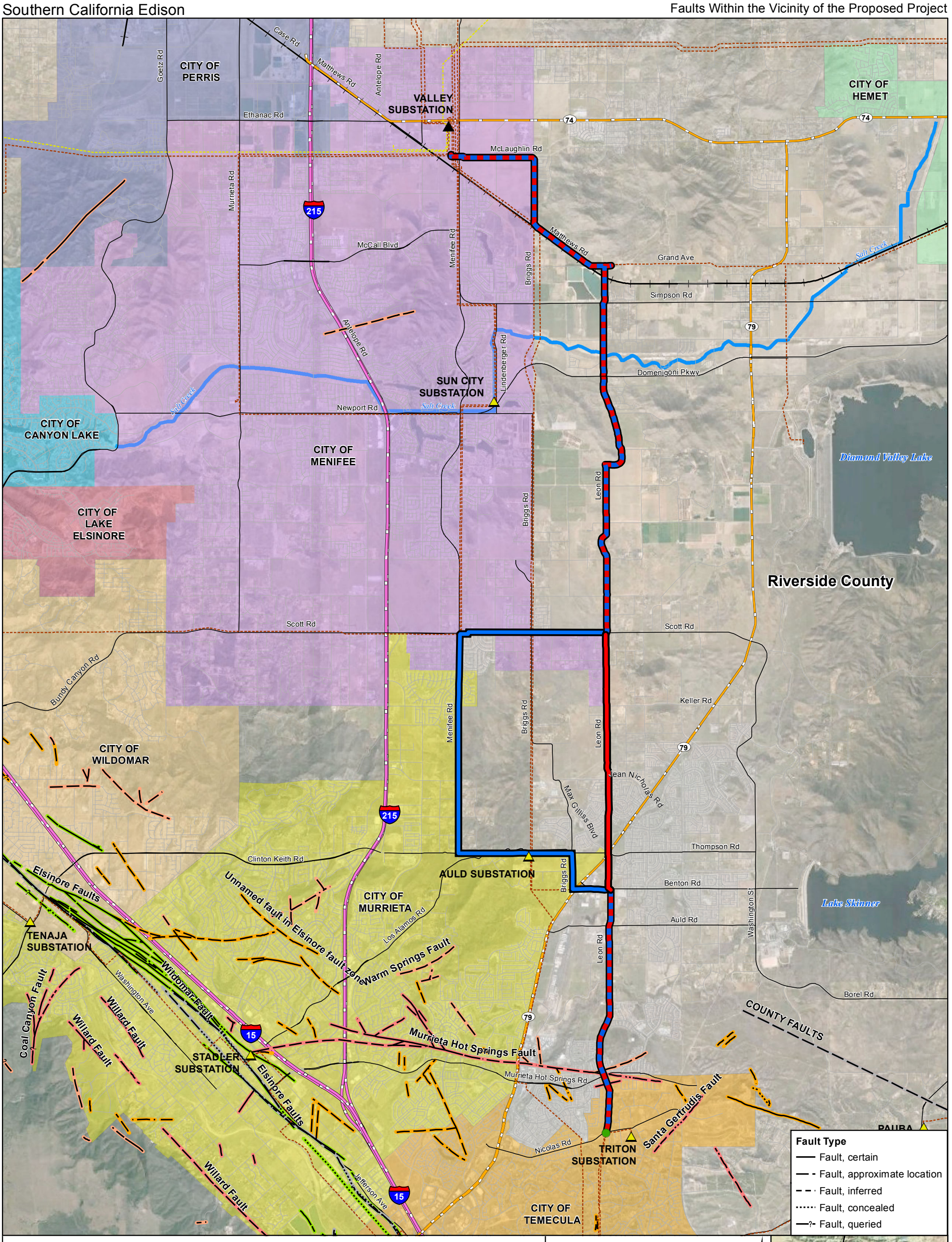
VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.6-2b**

Southern California Edison

Faults Within the Vicinity of the Proposed Project



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

Fault Activity
- No Data

Potentially Active
- Quaternary
- Late Quaternary
- Pre-quaternary

Active
- Historic
- Holocene

Note: only Elsinore Fault is active

Fault Type
- Fault, certain
- Fault, approximate location
- Fault, inferred
- Fault, concealed
- Fault, queried

Sources: SCE, 2014; Riverside County, 2014; California Geologic Survey, 2005
Aerial Image: Google Earth Pro, 2014

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Chapter 4

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The soils within the Proposed Project area are generally reflective of the underlying geologic units. Soil formation depends on the extent of weathering of the unit(s), which is governed by the ground surface slope, the long-term climate, vegetation cover, the degree of human modification, and time. All but a small portion is within close proximity to either agricultural fields or residential areas located near the south end of the Proposed Project area.

The soils underlying the Proposed Project area are generally well drained, with some excessively drained, consisting of loamy sands, silty clay loams, clayey loams, coarse sandy loams, and rocky sandy loams on low river terraces and alluvial deposits. Most soils in the Proposed Project area have a low to moderate shrink/swell potential; the susceptibility to erosion ranges from low to very high, being influenced both by soil type and slope.

In general, the important factors that affect construction in these soil units are foundation-bearing capacity, shrink/swell potential, erosion potential, collapsibility, and chemical reactivity with concrete and steel.

As presented in Table 4.6-3 Soil Conditions, some of the silty, clay and sandy loam soils underlying the Proposed Project area are classified as "saline alkali" and have a relatively alkaline pH of approximately 7.1 to 8.4 (United States Department of Agriculture, 2013). The shrink/swell potential is low to moderate for coarser texture soils, as indicated in the Web Soil Survey database (United States Department of Agriculture, 2009).

A summary of the significant characteristics of the soil types associated with the Proposed Project are presented in Table 4.6-3 Soil Conditions. Exposed geologic units within the Proposed Project area are presented on Figure 4.6-1 Geologic Map.

Table 4.6-3 Soil Conditions

Map Unit	Map Unit Name	Shrink-Swell Potential
AtC2	Arlington and Greenfield fine sandy loams, 2 to 8 percent slopes, eroded	Low
AtD2	Arlington and Greenfield fine sandy loams, 8 to 15 percent slopes, eroded	Low
AuC	Auld clay, 2 to 8 percent slopes	High
AuD	Auld clay, 8 to 15 percent slopes	High
BfC	Bosanko clay, 2 to 8 percent slopes	High
BkC2	Buchenau silt loam, 2 to 8 percent slopes, eroded	Moderate
BxC2	Buren loam, deep, 2 to 8 percent slopes, eroded	Low
CaC2	Cajalco fine sandy loam, 2 to 8 percent slopes, eroded	Moderate
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	Low
CbF2	Cajalco rocky fine sandy loam, 15 to 50 percent slopes, eroded	Low

Map Unit	Map Unit Name	Shrink-Swell Potential
Ce	Chino silt loam, drained	Moderate
Cf	Chino silt loam, drained, saline-alkali	Moderate
ChC	Cieneba sandy loam, 5 to 8 percent slopes	Low
ChD2	Cieneba sandy loam, 8 to 15 percent slopes, eroded	Low
CkD2	Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded	Low
CkF2	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded	Low
Ds2	Domino fine sandy loam, eroded	Low
Dt	Domino fine sandy loam, saline-alkali	Low
Du	Domino silt loam	Low
Dv	Domino silt loam, saline alkali	Low
Dw	Domino silt loam, strongly saline-alkali	Low
EnA	Exeter sandy loam, 0 to 2 percent slopes	Low
EnC2	Exeter sandy loam, 2 to 8 percent slopes, eroded	Low
EpA	Exeter sandy loam, deep, 0 to 2 percent slopes	Low
FaD2	Fallbrook sandy loam, 8 to 15 percent slopes, eroded	Low
FfC2	Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded	Low
FkD2	Fallbrook fine sandy loam, shallow, 8 to 15 percent slopes, eroded	Moderate
FwE2	Friant fine sandy loam, 5 to 25 percent slopes, eroded	Low
GtA	Grangeville fine sandy loam, drained, 0 to 2 percent slopes	Low
GyA	Greenfield sandy loam, 0 to 2 percent slopes	Low
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	Low
HcA	Hanford coarse sandy loam, 0 to 2 percent slope	Low
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	Low
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes, eroded	Low
HgA	Hanford fine sandy loam, 0 to 2 percent slopes	Low
HnC	Honcut sandy loam, 2 to 8 percent slopes	Low
LaC	Las Posas loam, 2 to 8 percent slopes	High
LaC2	Las Posas loam, 5 to 8 percent slopes, eroded	High
LaD2	Las Posas loam, 8 to 15 percent slopes, eroded	High

Map Unit	Map Unit Name	Shrink-Swell Potential
LaE3	Las Posas loam, 8 to 25 percent slopes, severely eroded	High
LkF3	Las Posas rocky loam, 15 to 50 percent slopes, severely eroded	Moderate
MmB	Monserate sandy loam, 0 to 5 percent slopes	Low
MmC2	Monserate sandy loam, 5 to 8 percent slopes, eroded	Low
MnD2	Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded	Low
PaA	Pachappa fine sandy loam, 0 to 2 percent slopes	Moderate
PoC	Porterville clay, 0 to 8 percent slopes	High
PsC	Porterville clay, moderately deep, 2 to 8 percent slope s	High
PtB	Porterville clay, moderately deep, slightly saline-alkali, 0 to 5 percent slopes	High
PvD2	Porterville gravelly clay, moderately deep, 2 to 15 percent slopes, eroded	High
RaA	Ramona sandy loam, 0 to 2 percent slopes	Low
RaB3	Ramona sandy loam, 0 to 5 percent slopes, severely eroded	Low
ReC2	Ramona very fine sandy loam, 0 to 8 percent slopes, eroded	Low
RmE3	Ramona and Buren sandy loams, 15 to 25 percent slopes, severely eroded	Low
RnE3	Ramona and Buren loams, 5 to 25 percent slopes, severely eroded	Low
RsC	Riverwash	Low
RuF	Rough broken land	N/A
TeG	Terrace escarpments	N/A
VeD2	Vallecitos loam, thick solum variant, 8 to 15 percent slopes, eroded	Moderate
VsC	Vista coarse sandy loam, 2 to 8 percent slopes	Low
VsD2	Vista coarse sandy loam, 8 to 15 percent slopes, eroded	Low
VtF2	Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded	Low
Wg	Willows silty clay, saline alkali	High
WyC2	Wyman loam, 2 to 8 percent slopes, eroded	Moderate
YbC	Yokohl loam, 2 to 8 percent slopes	Moderate
Source: National Resource Conservation Service, 2014		

4.6.1.4.1 Geologic Hazards

Potential geologic and seismic hazards at the Proposed Project area are primarily related to the effects of earthquakes occurring on active faults in the surrounding area. Faulting and earthquake hazards are generally categorized as primary, related to damage from surface ground rupture on the fault line itself, and secondary seismic effects, due to strong ground motions and shaking in areas at distance from the fault rupture zone and earthquake epicenter.

Secondary seismic effects associated with seismically induced ground motion include earthquake-triggered landslides, liquefaction, lateral spreading, and others. Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the Proposed Project to the seismic source, soil conditions, and depth to groundwater.

4.6.1.4.2 Fault Rupture

The Proposed Project is located in seismically active southern California, a region that has experienced numerous earthquakes. A review of the AP Earthquake Fault maps (CDC, 2007a) and the Riverside County AP Earthquake Hazard Zone Map (Riverside County, 2008) shows that the Proposed 115 kV subtransmission line is not located within a currently established AP fault zone, as shown in Figure 4.6-3 Alquist-Priolo Fault Hazards. The closest AP fault zone is the Elsinore Fault Zone, Temecula Section (Wildomar Fault), located approximately 3 miles southwest of the Terminal TSP. The AP fault zone and faults included within the zone are shown in Figure 4.6-3 Alquist-Priolo Fault Hazards.

Potentially active faults are located within the Proposed Project area. Some potentially active faults trend toward the Proposed Project, but are undefined in the immediate area. These potentially active faults include a fault in basement rock west of Segment 1 of the Proposed Project and three inferred faults in proximity to or intersecting Segment 2 of the Proposed Project: Warm Springs, Santa Gertrudis, and Murrieta Hot Springs Faults. As shown in Figure 4.6-2b Faults Within the Vicinity of the Proposed Project, Warm Springs Fault and Santa Gertrudis Fault are located 2 miles west and 1 mile east of Segment 2 of the Proposed Project. Murrieta Hot Springs fault is inferred to intersect the southern portion of Segment 2 of the Proposed Project, approximately 1 mile north of the Terminal TSP.

Since no defined active faults cross beneath the Proposed Project, the potential for ground rupture hazard is considered very low in the Proposed Project area.

4.6.1.4.3 Ground Shaking and Ground Motion

Areas most susceptible to intense ground shaking are those located closest to the earthquake-generating fault, especially in 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 Proposed Project (CGS, 1995). 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 within bedrock typically experience less severe ground shaking than those underlain by loose, unconsolidated materials. The entire Proposed Project area would

likely be subject to strong ground shaking (CDC, 2008a) in the event of a major earthquake. Seismic ground shaking also can result in substantial structural damage.

The intensity of the seismic shaking, or strong ground motion, during an earthquake is dependent on the distance between the project area and the epicenter of the earthquake (point at the earth's surface directly above the initial movement of the fault at depth), the magnitude (seismic energy released) of the earthquake, and the geologic conditions underlying and surrounding the project site. Earthquakes occurring on faults closest to a project would be the most likely to generate the largest ground motion.

The United States Geological Survey provides a uniform estimate of the intensity (strength; not to be confused with magnitude) of earthquake-induced ground motion, based on an up-to-date assessment of potential earthquake faults or other sources. A commonly used benchmark is peak horizontal ground acceleration that is provided for probability of occurrence and represented as a fraction of the acceleration of gravity (g) (e.g., 0.2 g).

Approximate ground motion parameters have been estimated for the Proposed Project. They are listed in Table 4.6-4 Estimated Ground Motion Parameters in the Proposed Project area, based on the mid-point of the Proposed 115 kV subtransmission line.

Ground motions values presented in Table 4.6-4 Estimated Ground Motion Parameters in the Proposed Project Area represent a 10-percent probability of being exceeded during a 50-year period. They are expressed as a fraction of the acceleration resulting from gravity. Three ground motion values are shown: peak ground acceleration, short-period (0.2-second) spectral acceleration (S_a), and moderately long-period (1.0-second) S_a. Each ground motion value is shown for three site conditions: firm rock, soft rock, and alluvium. The Proposed Project is underlain primarily by alluvium at the surface and moderate to hard rock.

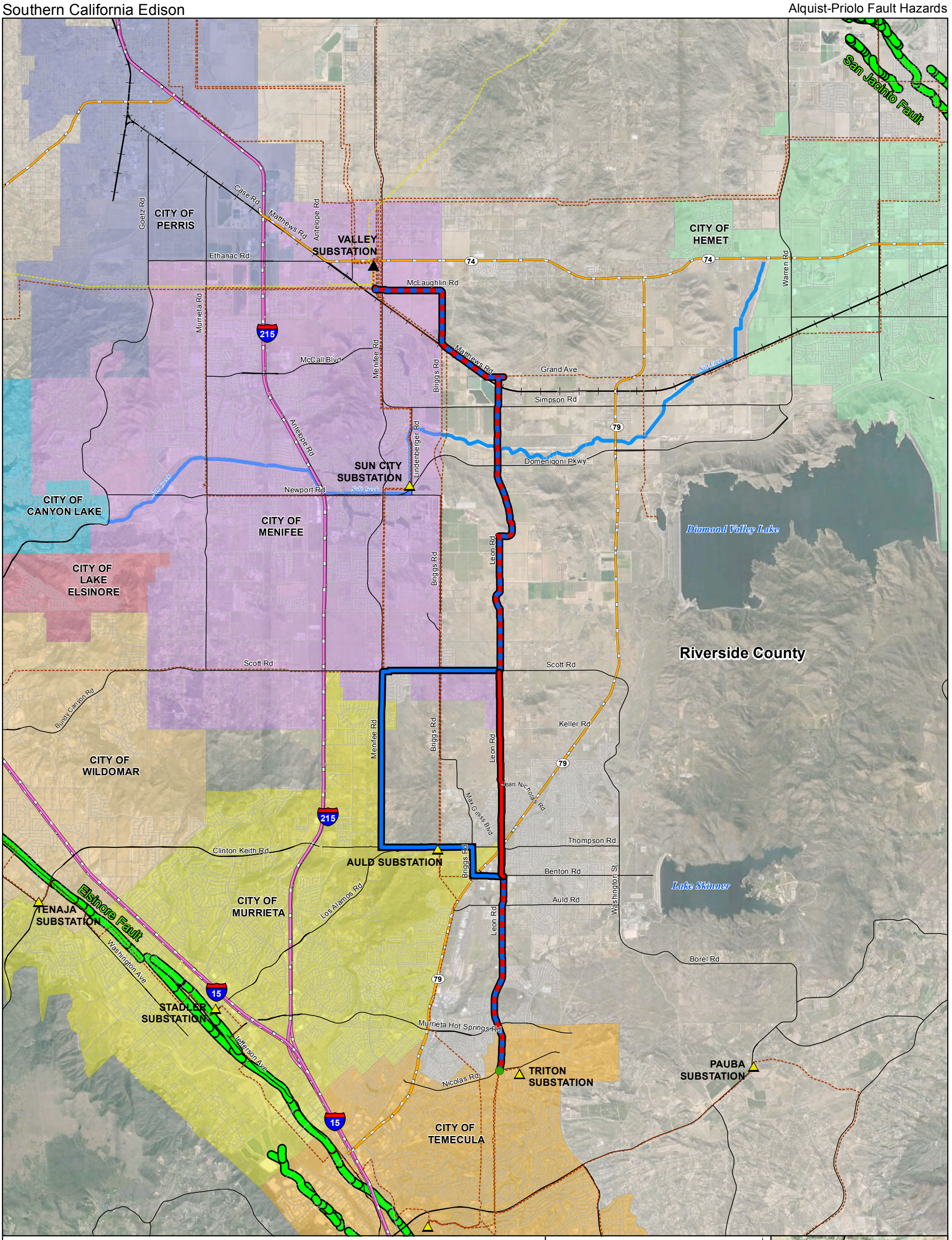
Earthquake-generated ground motion is the most critical and potentially damaging effect in the Proposed Project area. Three potential sources of strong seismic ground shaking include the San Jacinto Fault, the San Andreas Fault, and the Elsinore Fault. The major source of potential earthquake damage to the Proposed Project area is from activity along the San Jacinto Fault.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.6-3

Southern California Edison

Alquist-Priolo Fault Hazards



Proposed Project

- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project

- Alternative 115 kV Subtransmission Line

Existing Facilities

- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

Alquist-Priolo Special Studies Zone

- Earthquake Fault Zone*

*For fault traces, refer to Figure 4.6-2b.

Sources: SCE, 2014;
Riverside County, 2014;
Aerial Image:
Google Earth Pro, 2014

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The San Jacinto Fault runs northwest to southeast, about 8 miles northeast of Segment 1 of the Proposed Project. Additional faults of concern are the Murrieta Hot Springs Fault, which intersects Segment 2 of the Proposed Project approximately 1 mile north of the Terminal TSP; the San Andreas Fault and the Elsinore Fault, which are active faults located approximately 30 miles northeast of Segment 1 of the Proposed Project and 3 miles southwest of Segment 2 of the Proposed Project, respectively. Major earthquakes associated with any of these faults can result in moderate to severe ground shaking within the Proposed Project area. Damage to buildings and infrastructure may be expected as a result of strong to severe ground shaking during a seismic event.

Table 4.6-4 Estimated Ground Motion Parameters in the Proposed Project Area

Ground Motion	Firm Rock (g)	Soft Rock (g)	Alluvium (g)
Mid-Point along Proposed 115 kV Subtransmission Line			
Peak Ground Acceleration	0.405	0.405	0.443
S_a (0.2 second)	0.993	0.995	1.094
S_a (1.0 second)	0.394	0.482	0.572

Note:
*Acronyms: g = gravity; S_a = spectral acceleration
Source: CGS, 2013

4.6.1.4.4 Liquefaction

Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soil is altered from a solid to a fluid state when subjected to high-intensity ground shaking. Liquefaction occurs when the following exists: 1) shallow groundwater; 2) low-density, fine, clean sandy soil; and 3) high-intensity ground motion. Liquefaction involves a sudden loss in load-bearing strength of a saturated, cohesion-less soil (predominantly sand) caused by cyclic loading such as an earthquake. This phenomenon results in elevated pore-water pressures that temporarily transform the soil into a fluid mass resulting in vertical settlement and could include lateral deformations. Typically, liquefaction occurs in areas where groundwater is less than 50 feet from the surface and where the soil consists predominantly of poorly consolidated sands. Seismic ground motions also can induce settlement without liquefaction occurring, including within dry sands above the water table.

The potential for liquefaction to occur depends on both the susceptibility of a soil to liquefy and the opportunity for ground motions (shaking) to exceed a specified threshold level. Depending on specific soil conditions, such as density, uniformity of grain size, confining pressure and saturation of the soil materials, a certain intensity of ground shaking is required to trigger liquefaction. Ground shaking intensity depends on the magnitude, distance, and direction from the epicenter depth, type of earthquake, and the soil and bedrock conditions beneath a project area.

Many rocks and geologic units in the Proposed Project area are not susceptible to liquefaction (e.g., granitic rocks) or have low susceptibility, regardless of groundwater depth. Well-indurated or consolidated sediments generally represent very low liquefaction hazards. In addition, very coarse-grained poorly consolidated sediments, with gravel or boulders, present very low liquefaction hazards. Many unconsolidated fine-grained sediments (silt and clay) also present low to very low liquefaction susceptibility.

Due to the presence of granitic and metamorphic rocks, geologic units with low liquefaction susceptibility (e.g., coarse gravels), or lack of shallow groundwater, liquefaction susceptibility within the Proposed Project area generally is low (CGS, 2007a). A small portion of Segment 1 of the Proposed Project along Matthews Road and an area near Salt Creek have potentially high to very high liquefaction susceptibility. Liquefaction potential beneath Segment 2 of the Proposed Project is considered low from the intersection of Benton Road and Leon Road to the intersection of Leon Road and Allen Road; and very low from Murrieta Hot Springs Road to just north of the Terminal TSP. At the Terminal TSP located on the south side of Nicolas Road, liquefaction potential is moderate, as shown in Figure 4.6-4 Liquefaction Susceptibility.

4.6.1.4.5 Landslides

Landslides, rock falls, and debris flows may occur intermittently or continuously on all mountain or steep hilly slopes; some processes act very slowly (creep), while others occur very suddenly (mudflow or avalanche), with potentially disastrous results. Areas of landslides are, in general, confined to the areas of weak unconsolidated sediments, moist clay or fractured bedrock and adverse geologic structures such as: bedding, joints, or fracture planes dipping in downslope directions or shallow to deep slide rotational planes. Slides can result from certain geologic features, slope steepness, excessive rainfall, earthmoving disturbance, and seismic activity. Events and actions that trigger landslides include seismic ground shaking, over-weighting the slope with either naturally deposited colluviums or artificial fill, decreasing soil cohesiveness by adding water to the materials on the slope, excavation, development, or undercutting a slope through erosive action or human disturbance.

Landslides are uncommon in the Murrieta, Winchester, Bachelor Mountain, or Romoland Quadrangles where the Proposed Project is located (CGS, 2011). The few mapped landslides are small- to medium-size rotational rockslides that occur within the Pauba Formation and the unnamed sandstone of the Wildomar area. These formations are only present in Segment 2 of the Proposed Project.

A landslide map of the area is presented in Figure 4.6-5 Landslide Susceptibility. As shown, very few areas capable of landslide activity are present along the Proposed 115 kV subtransmission line. An area of moderate to high landslide susceptibility is present northeast of Segment 1 of the Proposed Project adjacent to the Matthews Road corridor, and areas susceptible to soil slumps and block slides are present in two locations along Segment 1 of the Proposed Project. Segment 2 of the Proposed Project passes through an area susceptible to soil slumps or soil block slides.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.6-4

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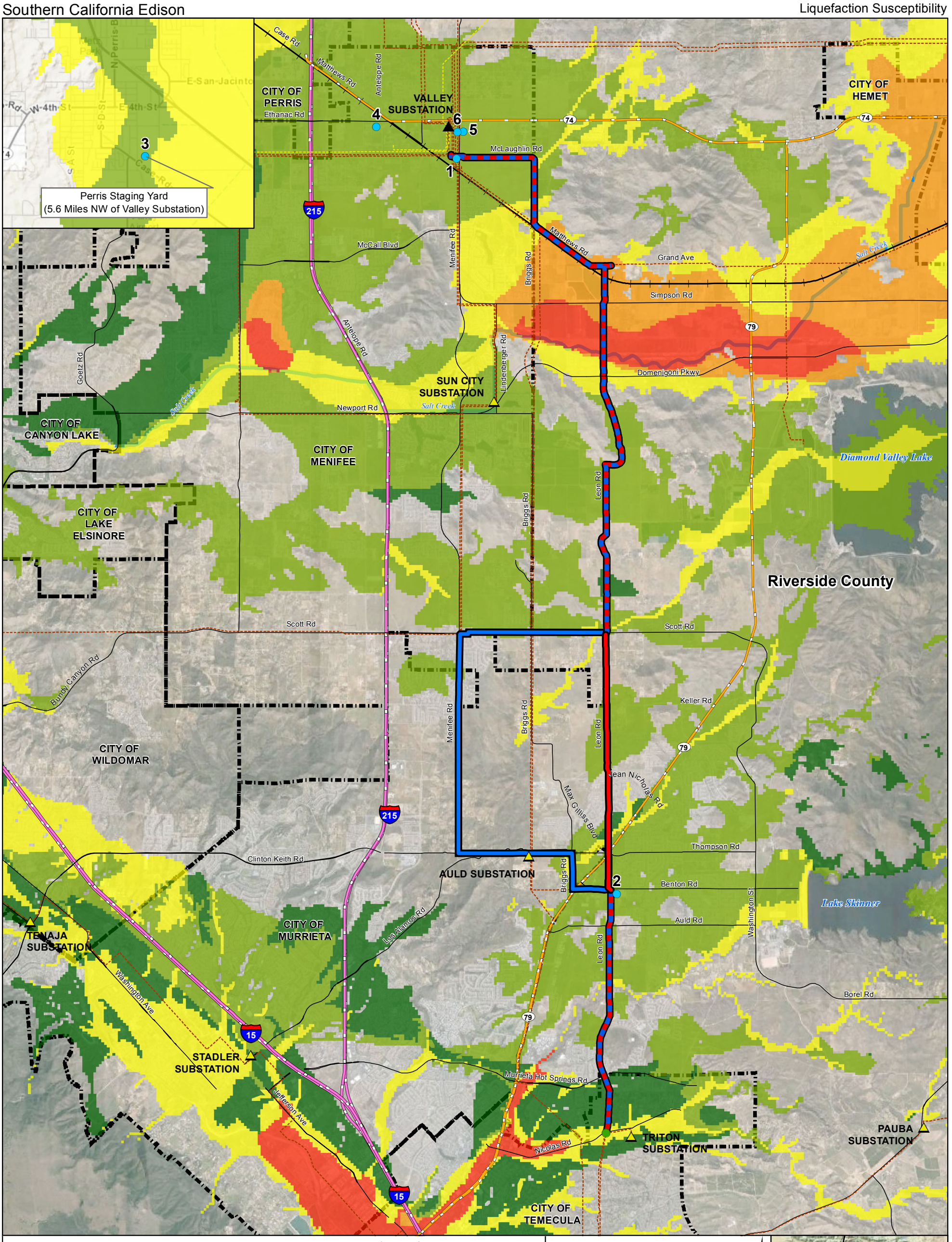
Liquefaction Susceptibility



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4.6.1.4.6 Subsidence

Subsidence is the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It can be caused by a various natural activities, including earthquakes, or by a variety of human activities.

Subsidence typically occurs throughout susceptible alluvial valley regions. In addition, differential displacement and fissures occur at or near the valley margin or outwash planes and along fault zones. Land subsidence is typically caused by subsurface voids, which are created during fluid or solid material withdrawal, such as groundwater and/or oil extractions or other mining activities. Therefore, the void in the subsurface caused by liquid or solid removal results in the sinking of the ground surface.

When fluid is withdrawn, the effective overlain pressure in the drained sediments increases. Compressible sediments are then compacted because of overlying pressures no longer being compensated by hydrostatic pressure from below. Subsidence and associated fissuring have occurred in a variety of places because of fluctuating (falling) groundwater tables (City of Moreno Valley, 2006). Several valleys (Perris, Menifee, Domenigoni, Paloma, and French) within the Proposed Project area of the Peninsular Ranges are susceptible to subsidence. Once subsidence occurs, the land cannot be restored to its original condition, even if groundwater rises. The void caused by fluid extracted has collapsed and cannot be restored, even by the replacement of alternate fluids.

The Proposed Project area is located within an area with a low potential for subsidence associated with fluid withdrawal (groundwater) caused by vast areas of agricultural development, farmland, and residential areas. Because the area is void of oil and mining activities, subsidence would be associated primarily with the withdrawal of groundwater from the sedimentary strata located within the valley(s) within the Proposed Project corridor. These alluvial valley regions along the Proposed 115 kV subtransmission line could be susceptible to subsidence resulting from groundwater extraction for agricultural and residential use.

To date, even though groundwater has been pumped, no evidence documents that substantial subsidence has occurred or may occur in the future in the Proposed Project vicinity. Based on the data reviewed, the likelihood of settlement either seismically induced or from other causes would be low.

4.6.1.4.7 Expansive Soils

Expansive soils have a significant amount of specific clay minerals that can give up water (shrink) or take on water (swell). The change in water volume in the clays can exert stress on the soil load-bearing materials. The distribution of expansive soils can be widely dispersed, and can occur in hillside areas as well as low-lying alluvial basins. Expansive soils generally are fine-grained with an appreciable amount of clay.

A project-specific assessment of the expansion potential of the soils along the Proposed 115 kV subtransmission line was performed for this analysis. Based on available data, most the soils in the Proposed Project area have low to moderate shrink/swell potential. As shown in Table 4.6-3 Soil Conditions, some soil units exhibit moderate to high shrink/swell potential. The soils with

moderate to high shrink/swell potential are predominantly located within approximately 1 mile of Salt Creek, along Segment 1 of the Proposed Project.

4.6.1.4.8 Collapsible Soils

Hydroconsolidation, or soil collapse, typically occurs in recently deposited, Holocene (less than 11,000 years old) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse commonly are associated with alluvial fan and mudflow sediments, deposited during flash floods, and wind-laid sands and silts. These soils usually contain micro-pores and voids, surrounded by soil particles that are partially supported by clays or silts or chemically cemented with a carbonate matrix. When saturated, collapsible soils undergo a chemical or physical rearrangement of their grain structure; water infiltration, such as from irrigation sources or a rise in the groundwater table, combined with the weight of a building or structure, can initiate settlement and cause foundations and walls to crack (Riverside County, 2008).

In Riverside County, collapsible soils occur predominantly at the base of mountains where Holocene-age alluvial fan and outwash sediments have been deposited during rapid runoff events. In addition, some windblown sands may be vulnerable to collapse and hydroconsolidation (Riverside County, 2008). The soils within the Proposed Project area consist predominantly of silty sand to sandy silt with clay. A review of the identified soil types along the Proposed 115 kV subtransmission line indicates that these soils generally exhibit a relatively tight-packing granular structure that is unlikely to collapse under stress.

4.6.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.6.2.1 Federal

There are no federal regulations related to geology and soils that would apply to the Proposed Project.

4.6.2.2 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development and construction of the buildings intended for human occupancy to avoid the hazards of surface fault rupture. The Act provides for the adoption and administration of zoning laws, ordinances, rules, and regulations by cities and counties in implementation of the general plan that is in effect in any city or county. It is intended to provide policies and criteria to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of developments and structures for human occupancy across the trace of active faults.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.6-5

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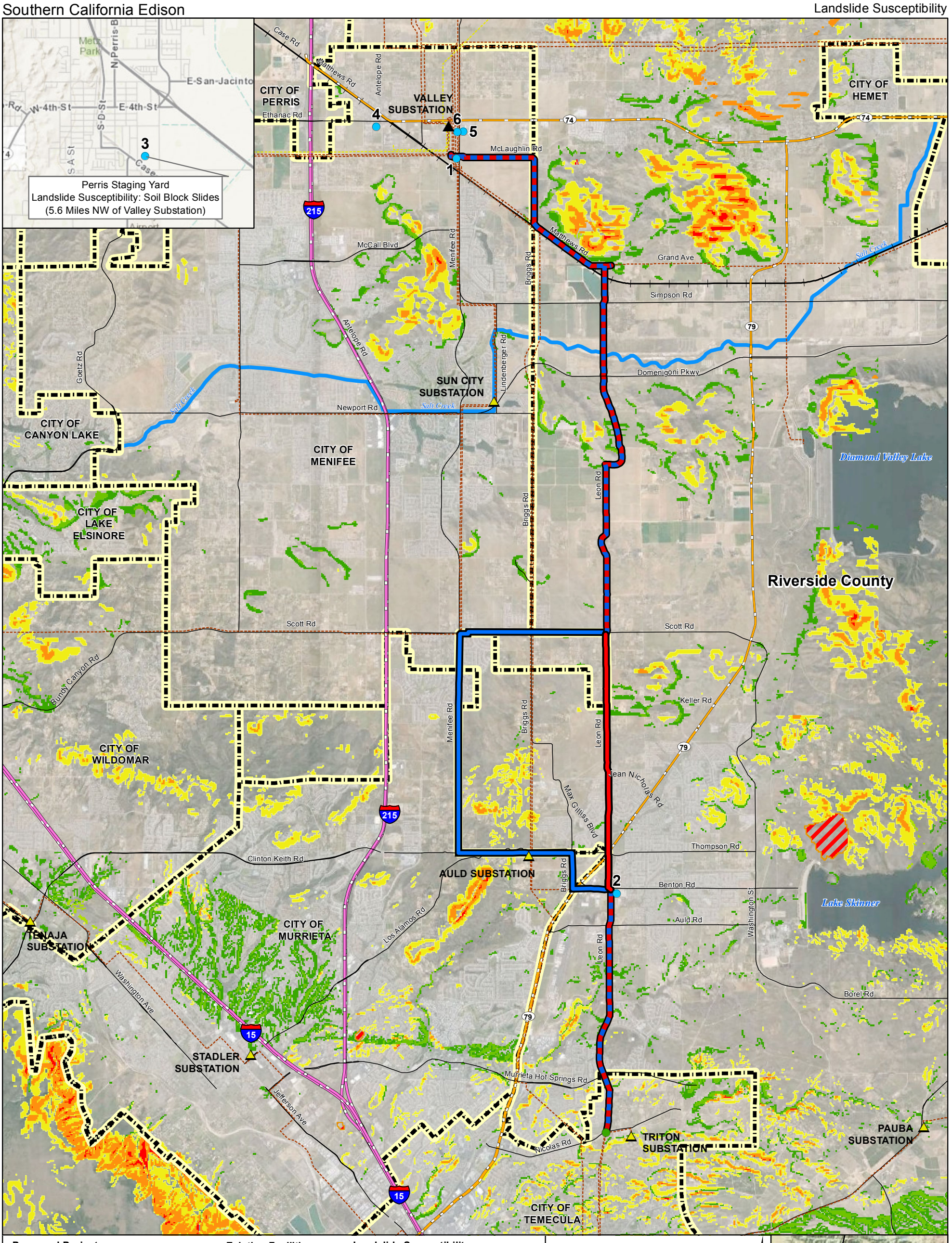
Landslide Susceptibility



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Potential Material Staging Yards
- Staging Yards 1-6

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line
- City Boundary

Landslide Susceptibility
- Soil Block Slides
- Soil Slumps
- Disrupted Soil Slide
- Moderate
- High
- Very High
- Existing Mapped Landslides

Sources: SCE, 2014;
Riverside County, 2014;
Aerial Image:
Google Earth Pro, 2014

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Furthermore, it is the intent of the Act to provide the citizens of the state with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings, including historical buildings, against ground shaking.

Although this Act does not specifically regulate overhead transmission lines, it does help define areas where fault rupture is most likely to occur. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be "sufficiently active" and "well defined" by detailed site-specific geologic explorations to determine whether building setbacks should be established (CDC, 2007c).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Division 2) directs the CGS to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. The Act addresses the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes.

The Act also addresses tsunamis and seiches. It states that maps may include potential effects of tsunami and seiche when information becomes available from other sources and the State Geologist determines the information is appropriate for use by local government. Studies conducted to date do not cover a large portion of the Proposed Project area (CGS, 2008).

4.6.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

City of Menifee General Plan

The following policies identified in the City of Menifee General Plan Safety Element would be relevant to the Proposed Project (City of Menifee, 2013):

- S-1.3: Encourage the city's utility service providers to identify sections of their distribution networks that are old and/or in areas susceptible to earthquake-induced ground deformation, and to repair, replace, or strengthen the sections as necessary

- S-2.3: Minimize grading and modifications to the natural topography to prevent the potential for man-induced slope failures

4.6.3 Significance Criteria

The significance criteria for assessing the impacts to geology and soils come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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 (Refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides
- 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 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 strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides?

Construction

Less than Significant Impact. As shown in Figure 4.6-2b Faults Within the Vicinity of the Proposed Project, and Figure 4.6-3 Alquist-Priolo Fault Hazards, no designated active or potentially active faults are delineated in the immediate vicinity of Segment 1 of the Proposed Project; however, Murrieta Hot Springs fault intersects Segment 2 of the Proposed Project approximately 1 mile north of the Terminal TSP. Due to the temporary nature of construction activities, the probability of a large earthquake exposing construction personnel to fault rupture and seismic-related hazards would be extremely low. Therefore, the impact would be less than significant.

Operation

Less than Significant Impact. Operations and Maintenance (O&M) of the Proposed Project would include routine inspection and maintenance of the Proposed 115 kV subtransmission line. As described above for construction impacts, one inferred, potentially active fault is delineated in the southernmost portion of Segment 2 of the Proposed Project. Faults in the region are capable of generating strong to intense ground motion that represent secondary seismic-related hazards to buildings and structures. It is likely that the Proposed Project area will experience minor to moderate earthquakes and potentially a major earthquake (7.0 moment magnitude or greater) during the Proposed Project's service life. A 1995 estimate by the Working Group on California Earthquake Probabilities gave an 80 to 90 percent probability of a 7.0 or greater earthquake in Southern California before 2024. Proposed Project components would be designed consistent with CPUC G.O. No. 95- Rules for Overhead Line Construction to withstand wind, temperature, and wire tension loads. SCE's structural design standards for transmission lines is conservative and based on wind loading, which is more restrictive than seismic hazard. Accounting for these factors would result in a design that would be adequate to withstand expected seismic loading. Therefore, the impact would be less than significant.

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

Construction

Less than Significant Impact. The Proposed Project is located within a largely agricultural area, with vegetation cover and residential areas with numerous building structures. The potential for soil erosion is rated as low to very high, depending on location. All but a small portion of the Proposed 115 kV subtransmission line is located within close proximity to either agricultural fields or residential areas. The Proposed Project would result in the disturbance of surface soil and potential alteration of natural drainages during construction, resulting in an increase in unprotected soil that would make it more vulnerable to erosion, particularly in areas classified as having very high erosion potential. Wind and water-driven erosion of soils resulting from grading activities may be of concern if soil is stockpiled or exposed during construction. During construction, Storm Water Pollution Prevention Plans would be implemented to control potential erosion of temporarily disturbed areas. Following the completion of construction, all areas temporarily disturbed by Proposed Project construction activities would be stabilized. Stabilized areas could be inclusive of, but would not be limited to some access roads, potential material staging yards, and stringing (pulling, tensioning, and splicing set-up locations) sites. Stabilization of these areas could include reseeding with native seed mix to stabilize soils and minimize future soil and topsoil erosion. Therefore, the impact would be less than significant.

Operation

Less than Significant Impact. O&M of the Proposed Project would include routine inspection and maintenance of the Proposed 115 kV subtransmission line, and this would not result in substantial erosion or loss of topsoil. The impact would be less than significant.

4.6.4.3 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?

Construction

Less than Significant Impact. The relatively flat topography along the majority of the Proposed 115 kV subtransmission line indicates little to no potential for landslides to occur. No evidence exists that substantial subsidence has occurred or may occur in the future. The potential for liquefaction and/or associated lateral spreading ranges from nonexistent to very low within most of the project, to very high in a specific limited portion of the Proposed Project area. Within Segment 1 of the Proposed Project, the area where the proposed 115 kV subtransmission line crosses the sandy sediments associated with Salt Creek shows moderate to high susceptibility for liquefaction potential. The potential for collapsible soils does not appear to be present. Liquefaction potential is high along west Nicolas Road, in proximity to the Terminal TSP; however, susceptibility is considered low to very low throughout most of Segment 2 of the Proposed Project. Based on existing conditions and location, construction activities associated with the Proposed Project are not anticipated to encounter unstable soil or geologic units, cause landslides, or create unstable conditions. The probability of a major earthquake causing liquefaction or lateral spreading during construction is extremely low. Therefore, the impact would be less than significant.

Operation

Less than Significant Impact. The effects of O&M of the Proposed Project would be similar to those described for construction. Therefore, potential O&M impacts would be less than significant.

4.6.4.4 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?

Construction

Less than Significant Impact. A project-specific assessment of the expansion potential of the soils along the Proposed 115 kV subtransmission line was performed, as presented in Table 4.6-3 Soil Conditions. Soils underlying the Proposed Project area are generally well drained and consist of loamy sands, silty clay loams, clayey loams, coarse sandy loams, and rocky sandy loams on low river terraces and alluvial deposits. Most of these soils have a very low to low shrink/swell potential, and the only area that has a moderate to high shrink/swell potential is within Segment 1 of the Proposed Project around Salt Creek. The probability of construction activities encountering expansive soil and creating substantial risk are extremely low and potential impacts would be less than significant.

By implementing standard practices, and conducting a geotechnical investigation, information would be available to provide design criteria to mitigate potential effects of construction of the Proposed Project. The deep foundations of the subtransmission line TSP structures are generally

not impacted by the effects of expansive soils that occur at the ground surface. Therefore, with appropriate design, construction of the Proposed Project would not create substantial risk to life or property. The impact would be less than significant.

Operation

Less than Significant Impact. O&M of the Proposed Project would include routine inspection and maintenance of the Proposed 115 kV subtransmission line, and this would not result in substantial risk to life or property. Therefore, the impact would be less than significant.

4.6.4.5 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?

Construction

No Impact. No septic tanks are associated with construction of the Proposed Project. Therefore, no impact would occur.

Operation

No Impact. The effects of O&M of the Proposed Project would be similar to those described for construction. No impact would occur.

4.6.5 Applicant Proposed Measures

Because no impacts or less than significant impacts to geology and soils would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.6.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an

easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

The areas with moderate potential for earthquake-induced landslide hazards are present along the east-west trending portion of Segment 1 of the Alternative Project, near Auld 115/12 kV Substation. Since Segment 1 of the Alternative Project is entirely above ground, potential impacts would be low.

Segment 1 of the Alternative Project is not located in an area with known fault traces. It has the same potential for experiencing strong seismic activity as the Proposed Project area in the event of an earthquake. The closest active fault zone to Segment 1 of the Alternative Project is the Elsinore Fault Zone, located approximately 3 miles to the southwest. The closest potentially active fault zone to Segment 1 of the Alternative Project is the Warm Springs Fault, located approximately 1.25 miles south. The proximity of the potentially active Murrieta Hot Springs Fault (approximately 2.5 miles south) is such that construction and O&M of Segment 1 of the Alternative Project would have less impact to geology and soils than the Proposed Project. Therefore, any impacts would be less than significant.

As presented in Table 4.6-5 Soil Conditions of Segment 1 of the Alternative Project, the underlying soils of Segment 1 of the Alternative Project consist of clay, fine to coarse sandy loam, silt loam, loam, and rocky loam. The shrink/swell potential is high for the clayey soils and low to moderate for coarser texture soils, as indicated in the Web Soil Survey database (United States Department of Agriculture, 2009).

Table 4.6-5 Soil Conditions of Segment 1 of the Alternative Project

Map Unit	Map Unit Name	Shrink-Swell Potential
AuC	Auld clay, 2 to 8 percent slopes	High
AyF	Auld cobbly clay, 8 to 50 percent slopes	High
BfC	Bosanko clay, 2 to 8 percent slopes	High
CaC2	Cajalco fine sandy loam, 2 to 8 percent slopes, eroded	Moderate
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	Low
CbD2	Cajalco rocky fine sandy loam, 5 to 15 percent slopes, eroded	Low
Ce	Chino silt loam, drained	Moderate
ChF2	Cieneba sandy loam, 15 to 50 percent slopes, eroded	Low
CkD2	Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded	Low
CkF2	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded	Low
Du	Domino silt loam	Low
EcD2	Escondido fine sandy loam, 8 to 15 percent slopes, eroded	Low
FaD2	Fallbrook sandy loam, 8 to 15 percent slopes, eroded	Low
FwE2	Friant fine sandy loam, 5 to 25 percent slopes, eroded	Low
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	Low
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	Low
HnC	Honcut sandy loam, 2 to 8 percent slopes	Low
HuC2	Honcut loam, 2 to 8 percent slopes, eroded	Low
LaC	Las Posas loam, 2 to 8 percent slopes	High
LaD2	Las Posas loam, 8 to 15 percent slopes, eroded	High
LaE3	Las Posas loam, 8 to 25 percent slopes, severely eroded	High
LkF3	Las Posas rocky loam, 15 to 50 percent slopes, severely eroded	Moderate
LpE2	Lodo rocky loam, 8 to 25 percent slopes, eroded	Moderate
PtB	Porterville clay, moderately deep, slightly saline-alkali, 0 to 5 percent slopes	High
PvD2	Porterville gravelly clay, moderately deep, 2 to 15 percent slopes, eroded	High
RtF	Rockland	N/A
VeD2	Vallecitos loam, thick solum variant, 8 to 15 percent slopes, eroded	Moderate
VsC	Vista coarse sandy loam, 2 to 8 percent slopes	Low

Map Unit	Map Unit Name	Shrink-Swell Potential
VsD2	Vista coarse sandy loam, 8 to 15 percent slopes, eroded	Low
WyC2	Wyman loam, 2 to 8 percent slopes, eroded	Moderate
YbC	Yokohl loam, 2 to 8 percent slopes	Moderate
Source: National Resource Conservation Service, 2014		

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

Segment 2 of the Alternative Project has the same potential for experiencing strong seismic activity as the Proposed Project in the event of an earthquake. The closest active fault zone to Segment 2 of the Alternative Project is the Elsinore Fault Zone, located approximately 5 miles to the southwest. The proximity of the potentially active Murrieta Hot Springs Fault (approximately 2.5 miles south) is such that construction and O&M of Segment 2 the Alternative Project would experience the same impacts as the Proposed Project. Therefore, any impacts would be less than significant.

As presented in Table 4.6-6 Soil Conditions of Segment 2 of the Alternative Project, the underlying soils of Segment 2 the Alternative Project consist of clay, fine to coarse sandy loam, silt loam, and gravely loam. The shrink/swell potential is high for the clayey soils and low to moderate for coarser texture soils, as indicated in the Web Soil Survey database (United States Department of Agriculture, 2009).

Table 4.6-6 Soil Conditions of Segment 2 of the Alternative Project

Map Unit	Map Unit Name	Shrink-Swell Potential
AuC	Auld clay, 2 to 8 percent slopes	High
BfC	Bosanko clay, 2 to 8 percent slopes	High
BkC2	Buchenau silt loam, 2 to 8 percent slopes, eroded	Medium
CaC2	Cajalco fine sandy loam, 2 to 8 percent slopes, eroded	Medium
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	Low

Map Unit	Map Unit Name	Shrink-Swell Potential
Cf	Chino silt loam, drained, saline-alkali	Medium
ChD2	Cieneba sandy loam, 8 to 15 percent slopes, eroded	Low
FwE2	Friant fine sandy loam, 5 to 25 percent slopes, eroded	Low
LoF2	Lodo gravelly loam, 15 to 50 percent slopes, eroded	Medium
MmB	Monserate sandy loam, 0 to 5 percent slopes	Low
MmC2	Monserate sandy loam, 5 to 8 percent slopes, eroded	Low
MmD2	Monserate sandy loam, 8 to 15 percent slopes, eroded	Low
VeC2	Vallecitos loam, thick solum variant, 2 to 8 percent slopes, eroded	Medium
VsD2	Vista coarse sandy loam, 8 to 15 percent slopes, eroded	Low
WyC2	Wyman loam, 2 to 8 percent slopes, eroded	Medium
Source: National Resource Conservation Service, 2014		

4.6.7 References

Bryant, W. A., and E. W. Hart. 2007. Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act, with Index to Earthquake Fault Zones Map. *Special Publication 42*, Interim Revision.

California Department of Conservation (CDC). 2007a. Alquist-Priolo Earthquake Fault Zone Maps. Available: http://www.quake.ca.gov/gmaps/ap/ap_maps.htmAccessed April 2014.

_____. 2007b. 2010 Fault Activity Map of California. Available: http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html. Accessed April 2014.

_____. 2007c. Alquist-Priolo Earthquake Fault Zoning Act. Available: http://www.consrv.ca.gov/cgs/rghm/ap/Pages/Index.aspx. Accessed May 2014

_____. 2008a. Earthquake Shaking Potential for California. Available: http://www.conservation.ca.gov/cgs/information/publications/ms/documents/ms48_revised.pdf. Accessed May 2014.California Department of Conservation (CDC).

_____. 2008b. Ground Motion Interpolator. Available: http://www.quake.ca.gov/gmaps/PSHA/psha_interpolator.html. Accessed: May 2014

California Division of Mines and Geology (DMG). 1998. *Recommended Procedures for Implementation of CDMG Special Publication 117: Guidelines for Analyzing and Mitigating Landslides Hazards in California*. Available: www.scec.org/resources/020323landslide.html. Accessed October 2012.

_____. 1996. Geological Map: Romoland Quadrangle Sheet, 1:24,000 scale. Updated by D. M. Morton.

_____. 2001. Geological Map: Winchester Quadrangle Sheet, 1:24,000 scale. Updated by D. M. Morton, 2001.

California Geological Survey (CGS). 2002. California Geomorphic Providences, Note 36; 3. Available: http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_36/Documents/note_36.pdf Accessed May 2015.

_____. 2007a. Seismic Hazard Zones, Murrieta Quadrangle Available: http://gmw.consrv.ca.gov/shmp/download/quad/MURRIETA/maps/ozn_murr.pdf Accessed: May 2014

_____. 2007b. Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps, Special Publication 42, Interim Revision.

_____. 2008. *Special Publication 11A7, Guidelines for Evaluating and Mitigating Seismic Hazards in California*. Available: http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp117.pdf. Accessed May 2015.

_____. 2011. *Landslide Inventory Map of Murrieta Quadrangle*, Scale 1:24,000, Riverside County, California, December 2011. Available: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/lsim/LSIM_Murrieta.pdf Accessed April 2014

_____. 2013. Seismic Shaking Hazards in California. Available: http://redirect.conservation.ca.gov/cgs/rghm/pshamap/pshamain.html. Accessed May 2014.

California Public Utilities Commission (CPUC). 1995. General Order Index. Available: http://docs.cpuc.ca.gov/PUBLISHED/Graphics/589.PDF. Accessed May 2014.

City of Menifee. 2013. City of Menifee General Plan – Safety Element. Available: http://www.cityofmenifee.us/index.aspx?NID=222. Accessed April 2014.

City of Moreno Valley. 2006. *Moreno Valley General Plan*. Available: http://www.moreno-valley.ca.us/city_hall/general_plan.shtml Accessed: May 2015

Google Earth, Pro. 2012 and 2014.

Larsen, E.S.1948. Batholith and associated rocks of Corona, Elsinore, and San Luis Rey Quadrangles, Southern California. *Geological Society America Memorandum 29*; 182.

Leighton Consulting, Inc. (2010). *Appendix G: Seismic and Geologic Hazards Review*, General Plan Update, City of Murrieta, California, 8 January, 2010.

Morton, D.M., and Miller, F.K. 2006. Geologic Map of the San Bernardino and Santa Ana 30' X 60' Quadrangles, California; 1:100,000 scale. USGS, Open File Report 2006-1217, Sheet 1 of 4.

Riverside County. 2008. Riverside County Integrated Project (RCIP), Riverside County General Plan. Available: http://planning.rctlma.org/ZoningInformation/GeneralPlan/RiversideCountyGeneralPlan2008.aspx Accessed: May 2014

Riverside County, 2014. Geographic Information Services, Countywide GIS Data. Available at: http://gis.rivcoit.org/GISData.aspx

SCE, 2014. Project GIS Database.

United States Department of Agriculture. 2013. Web Soil Survey. Available: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. Accessed May 2014.

United States Geological Survey. 2013. California Quaternary Faults. Available: http://earthquake.usgs.gov/hazards/qfaults/google.php . Accessed May 2014.

USGS Mineral Resources, 2005. Mineral Resources Online Spatial Data, Mineral Resources Data System. Available at: http://mrdata.usgs.gov/mrds/select.php

Section 4.7
Greenhouse Gas Emissions

4.7 Greenhouse Gas Emissions

This section describes greenhouse gas (GHG) regulations that are applicable in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.7.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

GHGs refer to gases that trap heat in the atmosphere, causing a greenhouse effect. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF_6). Atmospheric concentrations of the two most important directly emitted, long-lived GHGs, CO_2 and CH_4, are currently well above the range of atmospheric concentrations that occurred over the last 650,000 years (Pew Center, 2008). According to the Intergovernmental Panel on Climate Change (IPCC), increased atmospheric levels of CO_2 are correlated with rising temperatures; concentrations of CO_2 have increased by 31 percent above pre-industrial levels since the year 1750. Climate models show that temperatures would probably increase by 1.4 degrees Celsius (°C) to 5.8°C by the year 2100 (IPCC, 2007).

Global warming potential (GWP) estimates how much a given mass of a GHG contributes to climate change. The term enables comparison of the warming effects of different gases. GWP

uses a relative scale that compares the warming effect of the gas in question with that of the same mass of CO_2. The CO_2 equivalent (CO_2e) is a measure used to compare the effect of emissions of various GHGs based on their GWP, when projected over a specified time period (generally 100 years). CO_2e is commonly expressed as million metric tons of CO_2 equivalents. The CO_2e for a gas is obtained by multiplying the mass of the gas (in tons) by its GWP.

A more extensive discussion of GHG emissions and the effects that they may cause is available in the "*Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*" (California Natural Resources Agency, 2009).

4.7.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.7.2.1 Federal

Federal Mandatory Reporting of Greenhouse Gases (Section 40 Code of Federal Regulations [CFR] Part 98)

The United States Environmental Protection Agency (USEPA) promulgated this rule in 2009 to require mandatory reporting of GHG from large GHG emissions sources in 31 source categories in the United States. In general, the threshold for reporting is 25,000 metric tons (MT) or more per year of CO_2e. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs, along with vehicle and engine manufacturers, report at the corporate level. Facilities and suppliers began collecting data on January 1, 2010. The first emissions report was due on March 31, 2011, for emissions during 2010. Manufacturers of vehicles and engines outside of the light-duty sector began reporting CO_2 for model year 2011 and other GHGs in subsequent model years as part of existing USEPA certification programs.

Since 2012, USEPA regulations also require the reporting of SF_6 emissions from certain electrical facilities. See 40 C.F.R. Part 98, Subpart DD. SCE complies with these requirements. Furthermore, SCE has developed and would implement SF_6 gas management guidelines as described in SCE's document entitled "An Asset Management Approach for EPA/CARB SF_6 Regulations," dated April 2012. This document includes an overview of the tools and methods that SCE utilizes to comply with both EPA's Voluntary SF_6 Emission Reduction Partnership program and CARB's SF_6 Regulations. Following the guidelines in this document would ensure compliance with these regulations. This guideline document identifies storage methods, disposal method alternatives, and record-keeping requirements. Inventories are documented and annually reported to USEPA and CARB.

4.7.2.2 State

California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32)

The California Global Warming Solutions Act of 2006 (AB 32) charges the California Air Resources Board (CARB) with the responsibility of monitoring and regulating sources of GHG emissions in order to reduce those emissions. CARB established a scoping plan in December 2008 for achieving reductions in GHG emissions and has established and implemented regulations for reducing those emissions by the year 2020.

Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (Title 17 California Code of Regulations [CCR] Sections 95350 - 95359)

CARB adopted this rule in 2011 to reduce SF_6 emissions from gas-insulated switchgear and circuit breakers that use SF_6 as an electrical insulating medium. The rule specifies maximum annual SF_6 emission rates for each gas-insulated switchgear owner's active gas-insulated switchgear equipment. These emission rates decrease with time. The rule also specifies recordkeeping and reporting requirements. SCE complies with this regulation.

California Mandatory Greenhouse Gas Reporting Regulation (Title 17 CCR Sections 95100 - 95133)

Pursuant to AB 32, CARB adopted the Mandatory Greenhouse Gas Reporting Regulation. The facilities required to annually report their GHG emissions include electricity-generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 MT per year of CO_2e from stationary sources. In particular, retail providers of electricity are required to report fugitive emissions of SF_6 related to transmission and distribution systems, substations, and circuit breakers located in California that the retail provider or marketer is responsible for maintaining in proper working order. SCE complies with these requirements.

4.7.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The 2008 Riverside County General Plan does not currently contain policies or reduction measures geared toward reducing GHG emissions and climate change impacts. However, Riverside County is currently in the process of amending the General Plan to include policies and goals including development of a GHG inventory, establishment of GHG emission reductions, implementation of a Climate Action Plan, and implementation of measuring and monitoring programs to track progress in achieving reduction goals. Riverside County has not yet amended its General Plan, which was last updated in 2008, to include policies that specifically address GHG emissions (Riverside County, 2008).

City of Menifee General Plan

The Open Space and Conservation Element of the City of Menifee General Plan contains goals and policies specifically geared toward reducing GHG emissions (City of Menifee, 2013). These goals and policies include aligning the City of Menifee's local GHG reduction targets to be consistent with the statewide GHG reduction target of AB 32; aligning the City of Menifee's long-term GHG reduction goal consistent with the statewide GHG reduction goal of Executive Order S-03-05; participating in regional GHG emission reduction initiatives; and considering impacts to climate change as a factor in evaluation of policies, strategies, and projects (City of Menifee, 2013).

City of Murrieta Climate Action Plan

In 2011, the City of Murrieta adopted a Climate Action Plan which establishes GHG reduction measures and climate action strategies, including energy conservation, reduced water use and improved efficiency, improved transportation options, and land use development (City of Murrieta, 2011).

City of Perris General Plan

The City of Perris General Plan 2030 contains sustainability goals and conservation measures specifically geared toward reducing climate change impacts. Goals and measures include efficiency improvements related to building materials, energy use, water use, and project design (City of Perris, 2008).

City of Temecula General Plan

The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2005). The Air Quality Element contains specific goals, policies, and implementation programs aimed at achieving improvements to air quality, integration of air quality issues into land use planning decisions, reducing air pollutant emissions from automobiles, and conserving energy. There are no policies adopted for the purpose of reducing the emissions of GHG that would apply to the Proposed Project.

SCE's Sulfur Hexafluoride Gas Management Guidelines

SCE's SF_6 Gas Management Guidelines require proper documentation and control of SF_6 gas inventories, whether in equipment or in cylinders. Inventories are documented on both a quarterly and a yearly basis. SCE assumes that any SF_6 gas that is purchased and not used to fill new equipment is needed to replace SF_6 gas that has inadvertently leaked from equipment already in service. This assumption forms the basis for SCE to track and manage SF_6 gas emissions.

SCE has taken proactive steps in the effort to minimize GHG emissions since 1997. In 1997, SCE established an SF_6 Gas Resource Team to address issues pertaining to the environmental impacts of SF_6. The team developed the Gas Management Guidelines that allow for rapid location and repair of equipment leaking SF_6 gas. In addition, in 2001, SCE's parent organization, Edison International, joined the USEPA's voluntary SF_6 gas management program, committing SCE to join the national effort to minimize emissions of this GHG. SCE has made a significant investment in not only improving its SF_6 gas management practices, but also in purchasing state-of-the-art gas handling equipment that minimizes SF_6 leakage. The new equipment has improved sealing designs that virtually eliminate possible sources of leakage. SCE has also addressed SF_6 leakage on older equipment by performing repairs and replacing antiquated equipment through its infrastructure replacement program.

4.7.3 Significance Criteria

The significance criteria for assessing the impacts from GHG emissions are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions

Greenhouse Gas Thresholds

The South Coast Air Quality Management District (SCAQMD) has prepared a Draft Guidance Document entitled *Interim CEQA Greenhouse Gas Significance Thresholds* (SCAQMD, 2008a) for evaluating operational and construction impacts of proposed industrial projects, and has adopted an interim threshold of 10,000 MT per year of CO_2e, which includes emissions from stationary and transportation-related sources. Per SCAQMD guidance, construction emissions should be amortized over the economic life of the Proposed Project, which is proposed at 30 years.

4.7.4 Impact Analysis

4.7.4.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Less Than Significant Impact. During construction of the Proposed Project, emissions of GHG, predominately in the form of CO_2, would be generated during operation of diesel-fueled off-road equipment and diesel- and gasoline-fueled on-road motor vehicles. GHG emissions from off-road equipment were estimated by multiplying daily usage times total days per construction activity by equipment-specific GHG emission factors. The emission factors were obtained from CARB's OFFROAD (2011) model and represent the estimated fleet-wide average emission factors during 2018 within the South Coast Air Basin.

Emissions from the operation of gasoline-fueled and diesel-fueled on-road motor vehicles, such as construction personnel commute vehicles, haul trucks, dump trucks, and flat-bed trucks were estimated using the CARB's On-Road EMFAC2007 mobile source emission factors, obtained from the SCAQMD's website (SCAQMD, 2008c). Haul truck and construction personnel trips are assumed to cover a daily roundtrip distance of 60 miles during material delivery and removal.

Construction-related GHG emissions generated during implementation of the Proposed Project were estimated by summing total emissions for the 16-month construction duration and were then amortized over the projected economic lifetime, assumed to be equal to 30 years. Total and amortized construction-related GHG emissions are shown in Table 4.7-1 GHG Emissions Impact Analysis. Schedule assumptions, hours of operation, equipment type, and detailed emission calculations are provided in Appendix E, Construction Emission Calculations, of the PEA. As discussed in more detail in *Operation* below, the combined amortized construction and operational emissions are used to make the determination that the impact would be less than significant.

Table 4.7-1 GHG Emissions Impact Analysis

Construction Phase	CO_2e (MT per Year)
Construction	
Substation Construction	64.5
Subtransmission Line Construction	1,540.1
Distribution Relocation	184.4
Telecommunications Construction	5.4
Total Construction Emissions	**1,794.4**
Amortized Construction Emissions[1]	**60**

Construction Phase	CO_2e (MT per Year)
Operations and Maintenance (O&M)	
SF_6 Leakage	**9**
Mobile Sources	**<1**
Total O&M Emissions	**10**
Total Annual GHG Emissions[2]	**70**
Significance Threshold	**10,000**
Exceed Threshold?	No

Note:

[1] The SCAQMD recommends annualizing construction emissions over 30 years in the GHG analysis.

[2] Total Annual GHG emissions are the sum of the amortized construction emissions (60 metric tons per year) and total O&M emissions (10 metric tons per year).

Operation

Less Than Significant Impact. O&M would result in direct releases of GHG emissions including CO_2 emissions from maintenance/personnel vehicle trips to the Proposed 115 kV subtransmission line and SF_6 emissions from circuit breaker leakage. During O&M of the Proposed Project, emissions of GHG's would be generated due to the operation of two new 115 kV circuit breakers proposed to be installed at SCE's existing Valley 500/115 kV Substation, and on-road vehicle trips for routine inspection and maintenance. Circuit breakers contain SF_6, which provides insulation, and may result in leakage during equipment operation. Emissions from equipment leakage have been estimated assuming an annual leakage rate equal to 0.5 percent (based on the manufacturer's guaranteed maximum leakage rate) and 120 to 180 pounds of SF_6 (based on 60 to 90 pounds of SF_6 per circuit breaker).

Emissions from maintenance vehicles used during O&M of the Proposed Project were estimated using the CARB's On-Road EMFAC2007 mobile source emission factors, obtained from the SCAQMD's website (SCAQMD, 2008c).

Table 4.7-1 GHG Emissions Impact Analysis summarizes the amortized construction and annual operational GHG emissions generated from implementation of the Proposed Project and compares them to the SCAQMD interim significance threshold for industrial projects of 10,000 MT per year of CO_2e.

As shown in Table 4.7-1 GHG Emissions Impact Analysis, the project-related construction and O&M GHG emissions would total 70 MT per year of CO_2e, which is less than the SCAQMD interim threshold. Therefore, the impact would be less than significant.

4.7.4.2 Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction

State Policies

Less Than Significant Impact. Currently, state law does not require GHGs to be included in Air Quality Management Plans and they are not currently regulated by local Air Quality Management Districts. Statewide GHG emissions are regulated through AB 32, which codifies the state's GHG emissions target by requiring the state's GHG emissions be reduced to 1990 levels by 2020 and directs CARB to enforce the Statewide Climate Action Plan. As shown in Table 4.7-1 above, the Proposed Project emissions are less than the SCAQMD interim GHG thresholds and, therefore, would not conflict with any state targets for GHG emission reductions.

Furthermore, the Climate Action Team, which consists of representatives from various state boards and departments, including the CPUC, has issued various reports outlining strategies to reduce climate change-related emissions in California. The reports serve as the primary state guidance to date. SCE complies with all Climate Action Team guidance.

County and City Policies

The Proposed Project is predominately located in unincorporated Riverside County, with portions located in the cities of Murrieta, Menifee, Temecula, and Perris. As Riverside County has not yet amended its General Plan to include policies that specifically address GHG emissions or adopted its Climate Action Plan, there are no County policies adopted for the purpose of reducing the emissions of GHG that would apply to the Proposed Project. The City of Menifee General Plan contains goals and policies specifically geared toward reducing GHG emissions; however, the Proposed Project would not conflict with these plans. Components of the Proposed Project that would occur within the cities of Murrieta and Perris would not result in land use changes that would conflict with the sustainability and conservation measures established in the respective general plans.

Low-Emission Vehicle Fleet

The SCE fleet incorporates a significant number of clean diesel, electric, and hybrid-electric service vehicles. SCE fleet operations meet CARB emission standards for air quality criteria pollutants and reduce GHG emissions.

SCE is actively engaging in practices and programs to reduce GHG emissions, and SCE also complies with all Climate Action Team guidance. Further, construction of the Proposed Project would not conflict with plans, policies or regulations adopted by Riverside County or the cities of Murrieta, Menifee, Temecula, or Perris for the purpose of reducing GHG emissions. Thus, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

Operation

Less Than Significant Impact. As described in Section 4.7.2, Regulatory Setting, CARB has implemented a regulation designed to reduce and control SF_6 emissions from electricity transmission and distribution equipment. SCE would comply with the established requirements. SCE is actively engaged in practices and programs to reduce GHG emissions, and SCE also complies with all Climate Action Team guidance. O&M of the Proposed Project would not conflict with plans, policies, or regulations adopted by Riverside County or the cities of Murrieta, Menifee, Temecula, or Perris for the purpose of reducing GHG emissions. Thus, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

4.7.5 Applicant Proposed Measures

Because no significant impacts from GHG emissions would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.7.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

The Alternative Project is approximately 4 miles longer than the Proposed Project. Therefore, compared to the Proposed Project, construction and O&M of the Alternative Project would include an incrementally greater use of construction equipment and motor vehicles. Therefore, impacts related to GHG emissions and climate change would be incrementally greater for the Alternative Project, but would likely not exceed the SCAQMD interim threshold. Thus, the impact would remain less than significant.

4.7.7 References

California Natural Resources Agency. 2009. *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*. Available: http://ceres.ca.gov/ceqa/guidelines. Accessed December 2012.

City of Menifee. 2013. *City of Menifee General Plan – Open Space and Conservation Element*. Available: http://cityofmenifee.us/index.aspx?NID=250. Accessed April 2014.

City of Murrieta. 2011 (July). *Murrieta General Plan 2035*.

City of Perris. 2008 (February). *City of Perris General Plan Conservation Element*.

City of Temecula. 2005. General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed May 2014.

IPCC. 2007. Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Parry, Martin L., Canziani, Osvaldo, et al.]. Cambridge University Press, Cambridge, United Kingdom.

Pew Center on Global Climate Change. 2008. The Causes of Global Climate Change (science brief). USEPA. 2009a. 2009 Monitor Values Report: Criteria Air Pollutants.

Riverside County. 2008. *Riverside County General Plan*.

SCAQMD. 2008a. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. Available: http://www.aqmd.gov/ceqa/handbook/GHG/2008/oct22mtg/GHGguidance.pdf. Accessed December 2012.

———. 2008b. *CEQA Handbook. Offroad Mobile Source Emission Factors.* Available: http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html. Accessed May 2014.

_____. 2008c. *CEQA Handbook. Onroad Mobile Source Emission Factors.* Available: http://www.aqmd.gov/ceqa/handbook/onroad/onroad.html. Accessed May 2014.

United States Environmental Protection Agency (USEPA). 2009. *Mandatory Greenhouse Gas Reporting Rule.* Available: http://www.epa.gov/ghgreporting. Accessed November 2012.

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Section 4.8
Hazards and Hazardous Materials

4.8 Hazards and Hazardous Materials

This section describes hazards and hazardous materials in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.8.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

The information contained in the Hazards and Hazardous Materials section was developed by identifying and reviewing general and comprehensive plans and county and city websites, querying a number of federal and state databases, and evaluating aerial imagery.

4.8.1.1 Hazardous Waste

An Environmental Data Resources, Inc. (EDR) DataMap Corridor Study (2014) was reviewed for the Proposed Project. Additionally, a review of potentially existing hazardous waste sites within the Proposed Project area was conducted through a comprehensive online search and database review including the United States Environmental Protection Agency's (USEPA's) Comprehensive Environmental Response, Compensation, and Liability Information System public access online database, the State Water Resources Control Board (SWRCB) GeoTracker,

and the State of California Department of Toxic Substances Control EnviroStor online database. Sites with positive identification within these databases were further reviewed to identify potential impacts for the Proposed Project. All sites identified through the database searches were eliminated from consideration as a potential impact to the Proposed Project for one or a combination of the following reasons: facility type, nature of identified contamination (e.g. down gradient) and/or distance from the Proposed Project. The review of the EDR Corridor Study, available public records, and desktop review did not indicate evidence of potential environmental concerns for the Proposed Project.

4.8.1.2 Emergency Response

Riverside County has developed and implemented both an Operational Area Emergency Operations Plan (EOP) (Riverside County Fire Department [RCFD], 2006) and an Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan to respond to a number of natural and human-made disasters (RCFD, 2005).

The City of Murrieta has developed and implemented an EOP that addresses "planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting the City of Murrieta" (City of Murrieta, 2008).

The City of Menifee maintains an Emergency Operations Center and implements an Emergency Operations program, to plan, prepare, and respond to emergencies.

The cities of Menifee, Perris, and Temecula currently contract with the RCFD for fire and emergency services. The Perris Emergency Command Center (ECC) is part of the California Department of Forestry and Fire Protection's (CAL FIRE's) three-level command and control structure utilized for the day-to-day operations of the department and for dealing with emergency incidents. The Perris ECC is the Governor's Office of Emergency Services Local Area Coordinator for the California Fire Service and Rescue Emergency Mutual Aid System. Two alternative ECCs, located in Riverside and Indio respectively, are maintained to provide redundancy as a backup to the Perris ECC as communication centers in support of Riverside County Office of Emergency Services (OES) to coordinate multi-agency disaster management within Riverside County (RCFD, 2013).

Additional details regarding fire protection and emergency response services in the cities of Murrieta and Menifee, the City of Temecula and unincorporated Riverside County are provided in Section 4.14, Public Services.

4.8.1.3 Wildland Fires

The RCFD contracts with CAL FIRE to provide fire protection services to the unincorporated areas of the County, one community service district, and 21 contract cities, including the cities of Menifee, Perris, and Temecula (RCFD, 2009).

The Riverside Unit of CAL FIRE implements the CAL FIRE Riverside Unit 2012 Strategic Fire Plan (CAL FIRE, 2012). The RCFD operates 17 battalions (or districts). The Proposed Project

area is located in Battalion 13, which is 42 square miles and roughly follows the following boundaries: north of the cities of Murrieta and Wildomar, south of the City of Perris, west of the Winchester area, and northeast of the City of Lake Elsinore.

As shown in Figure 4.14-1 Public Services, several RCFD stations are located within the vicinity of the Proposed Project: Sun City Fire Station and Menifee Lakes Fire Station are both located in the City of Menifee; Perris Station is located in the City of Perris; Rancho California Fire Station is located in the City of Temecula; and Winchester Fire Station, Homeland Fire Station, and French Valley Fire Station are located in unincorporated Riverside County. As shown in Figure 4.14-1 Public Services, Homeland Fire Station and French Valley Fire Station are located within 1 mile of the Proposed Project.

The Murrieta Fire Department is the primary provider of fire suppression, emergency medical care, disaster preparedness coordination, hazard mitigation, and fire prevention services within the City of Murrieta. As of 2012, the Murrieta Fire Department employed 48 personnel at five stations and administrative offices (City of Murrieta Fire Department, 2012). Murrieta's nearest fire station to the Proposed Project is Murrieta Fire Station No. 4, which is located 2.64 miles west of Segment 1 of the Proposed Project in the City of Murrieta.

The primary anthropogenic, or human-made, ignition source for wildland fires in the Proposed Project area is equipment operations. Additional anthropogenic sources include welding/grinding, miscellaneous electrical activities, and arson. Natural fuel sources within the Proposed Project area include light native California vegetation (i.e., brush) (CAL FIRE, 2011).

On January 12, 2012, the California Public Utilities Commission (CPUC), through the issuance of Decision 12-01-032, established new rules to reduce fire hazards associated with overhead power lines. The new rules brought several changes that increased utility safety practices associated with power lines while improving safety conditions for residents living near these facilities. One such change was the addition of new paragraph 'E' to General Order 166, which required electric utilities to submit a Fire Prevention Plan to the CPUC by December 31, 2012, describing the short- and long-term measures to prevent power line fires during extreme fire-weather events. Due to this requirement, SCE prepared and submitted a Fire Prevention Plan to the CPUC in December 20, 2012.

The fire hazard zone classifications along the Proposed 115 kV subtransmission line include moderate to very high fire areas (CAL FIRE, 2007). Figure 4.8-1 Fire Hazard Severity Zones presents the hazard classes found in the vicinity of the Proposed Project.

4.8.1.4 Airports and Airstrips

One public airport, two private airstrips, and one private helipad are within 2 miles of the Proposed Project as listed in Table 4.8-1 Airports, Airstrips and Helipads Near Proposed Project.

Table 4.8-1 Airports, Airstrips and Helipads Near Proposed Project

Name of Airport (Type)	Proximity to Nearest Proposed Project Component	Distance and Direction
French Valley Airport (public airport)	Terminal TSP, located at southern termination point of Segment 2 of the Proposed Project	0.45 of a mile west
Pines Airpark (private airstrip)	Central portion of Segment 1 of the Proposed Project (Leon Road and Loretta Road)	0.55 of a mile east
Perris Valley Airport (private airstrip)	Southern mid-point of Material Staging Yard 3	0.12 of a mile south
SCE Menifee Service Center Helipad (private helipad)	East of Valley 500/115 kV Substation, near the intersection of State Route 74 and Menifee Road	0.18 of a mile east

The southern portions of the Proposed Project lie within the Airport Land Use Compatibility Plan area for the French Valley Airport. The Proposed Project would traverse though Land Use Compatibility Zones B1, C and D, which require limits on residential density and coordination with French Valley Airport for construction projects of certain heights. For instance, in Zone B1, an airspace review is required for structures greater than 35 feet in height. Additional details can be found in the Riverside County Airport Land Use Commission's New Compatibility Plan (Riverside County Airport Land Use Commission, 2004).

4.8.1.5 Schools

As shown in Table 4.8-2 Schools Near Proposed Project, two schools are located within 0.25 of a mile of Segment 1 of the Proposed Project and no schools were identified within 0.25 of a mile of Segment 2 of the Proposed Project.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.8-1

Southern California Edison

Fire Hazard Severity Zones

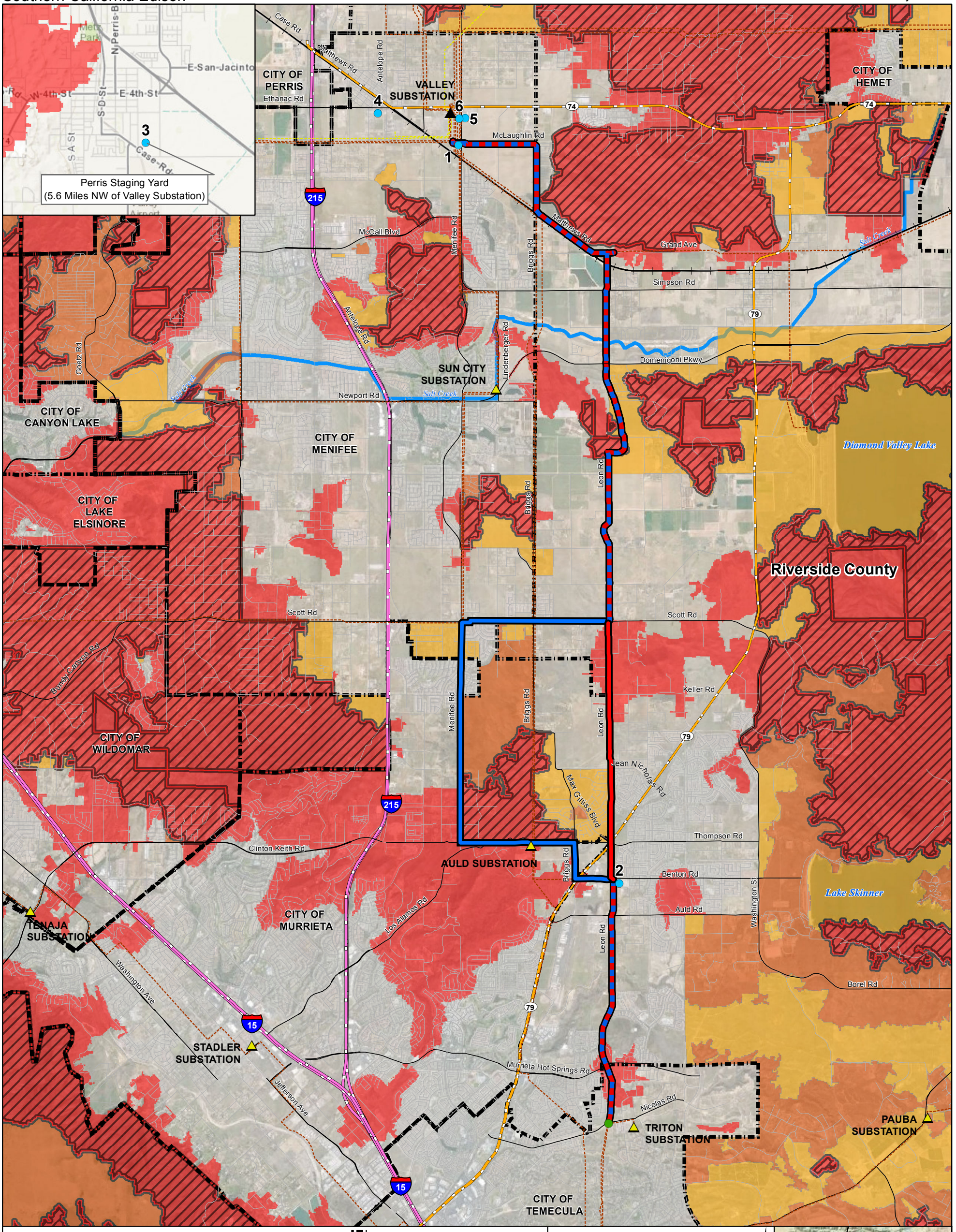

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Table 4.8-2 Schools Near Proposed Project

Number on Map[1]	School Name	School Address	Proximity to Segment 1 of the Proposed Project (Miles)[2]
10	Home Away From Home Daycare	Peregrine Way and Slater Avenue, Winchester, CA 92596	0.25
13	French Valley University Inc.	36555 Van Gaale Lane, Winchester, CA 92596	0.22

Notes:

[1] Map numbers correspond to Figure 4.14-1 Public Services. Schools shown in this figure include public and private schools, daycares, preschools, and colleges/universities.

[2] The distance measurements of Oliver Christian School Center and Romoland Elementary School were also taken from potential Material Staging Yard 4, given the close proximity of this site to these schools. Oliver Christian School (Number 1 on Figure 4.14-1) is 0.21 of a mile from Material Staging Yard 4 and Romoland Elementary School (Number 2 on Figure 4.14-1) is 0.24 of a mile from Material Staging Yard 4.

Sources: Google Earth, Pro, 2012 and 2014; data compiled by AECOM in 2012, 2013, and 2014.

These schools are described in Section 4.14, Public Services, and are shown on Figure 4.14-1 Public Services.

4.8.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.8.2.1 Federal

Clean Water Act

The Clean Water Act (33 U.S.C. § 1251 et seq.) was enacted to restore and maintain the chemical, physical, and biological integrity of the nation's waters by regulating point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. This includes the creation of the National Pollutant Discharge Elimination System (NPDES), which requires states to establish discharge standards specific to water bodies and regulates stormwater discharge from construction sites through the implementation of a Storm Water Pollution Prevention Plan(s) (SWPPP[s]) for construction sites with over an acre of ground disturbance.

Federal Occupational Safety and Health Administration

The Federal Occupational Safety and Health Administration (OSHA) establishes and enforces regulations covering the handling of hazardous materials in the workplace. The regulations established in the Code of Federal Regulations (CFR) Title 29 are designed to protect workers

from hazards associated with encountering hazardous materials at the work site. The regulations require certain training, operating procedures, and protective equipment to be used at work sites where hazardous materials may be encountered.

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA), which amended the Solid Waste Disposal Act (42 U.S.C. § 6901 et seq.), establishes a framework for the proper management of hazardous and non-hazardous solid waste. This act, along with the Toxic Substances Control Act of 1976 (TSCA), enacted a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes from their creation to disposal. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the HSWA. RCRA focuses on active and future facilities; it does not address abandoned or historical sites, which are managed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; 42 U.S.C. § 9601 et seq.).

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA; 42 U.S.C. § 9601 et seq.) established a nationwide emergency planning and response program and imposed reporting requirements for businesses which store, handle, or produce significant quantities of extremely hazardous materials. SARA requires the states to implement a comprehensive system to inform local agencies and the public when a significant quantity of such materials is stored or handled at a facility. Additionally, SARA identifies requirements for planning, reporting, and notification concerning hazardous materials

Toxic Substances Control Act of 1976

TSCA (15 U.S.C. § 2601 et seq.) was enacted by Congress to give the USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental human-health hazard. The USEPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Federal National Priorities List

The USEPA maintains a database of sites that are included on the National Priorities List (NPL) (40 CFR Part 300). The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the USEPA in determining which sites warrant further investigation and remediation. Sites are listed on the NPL on completion of Hazard Ranking System screening, followed by consideration of public comments on proposed listings.

Federal Hazardous Materials Regulations

The Federal Hazardous Materials Regulations (49 U.S.C. § 1501 et seq.) identify the required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations applicable to the shipment and transportation of hazardous materials.

Spill Prevention, Control, and Countermeasure Rule

The Federal Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR Part 112) was enacted to require response and cleanup after a spill occurs and prevent discharge of oil into navigable waters of the United States or adjoining shorelines. Facilities subject to the rule must prepare and implement an SPCC Plan.

Federal Aviation Regulation

The Federal Aviation Regulation (49 CFR Part 77) establishes standards and notification requirements for objects that may impact navigable airspace.

4.8.2.2 State

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code § 13000 et seq.) is a state law that provides a comprehensive water quality management system for the protection of California waters. The Porter-Cologne Act designates the SWRCB as the ultimate authority over state water rights and water quality policy, and establishes nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local/regional level. The RWQCBs have the responsibility of granting NPDES permits for stormwater runoff from Proposed Project construction sites.

CPUC General Order 95, General Order 128, and General Order 165

General Orders 95, 128, and 165, issued by the CPUC, specify construction, operation, and maintenance requirements for electrical facilities. Specifically, General Order 95 provides rules for overhead electrical line construction, General Order 128 provides rules for construction of underground electrical supply and communication systems, and General Order 165 provides inspection cycles for electrical distribution facilities (CPUC, 2012).

California Code of Regulations

The California Code of Regulations (CCR) is a catalog of state laws and regulations adopted by state agencies, including:

- Tit. 8 CCR § 2700 et seq., High Voltage Electrical Safety Orders, which establishes essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger

- Tit. 14 CCR § 1250-1258, Fire Prevention Standards for Electrical Utilities, which provides specific exemptions from electric pole and tower firebreak and electric conductor clearance standards, and specifies when and where standards apply

California Health and Safety Code

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 § 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, disposed, or otherwise managed (California Health and Safety Code § 25117).

California Resource Conservation Recovery Act

California's RCRA hazardous waste program (22 CCR Division 4.5) 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).

California Occupational Safety and Health Administration

Handling and storage of fuels, flammable materials, and common construction-related hazardous materials are governed by the California OSHA.

California Public Resources Code

California Public Resources Code (CPRC) Sections 4292 and 4293 specify requirements related to vegetation management in transmission line corridors.

CPRC Section 4292 states:

> any person that owns, controls, operates, or maintains any electrical transmission or distribution line…shall, during such times and in such areas as are determined to be necessary by the director or the agency, has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightening arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such a pole or tower (CPRC 4292).

CPRC 4293 states:

> any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such area, maintain a clearance of the respective distances

which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:

(a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, four feet

(b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, six feet

(c) For any line which is operating at 110,000 or more volts, 10 feet

In every case, such distance shall be sufficiently great to furnish the required clearance at any position of the wire, or conductor when the adjacent air temperature is 120 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened by decay or disease, and trees or portions thereof that are leaning toward the line, which may contact the line from the side or may fall on the line, shall be felled, cut, or trimmed so as to remove such hazard (CPRC 4293).

4.8.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

Fire policies and regulations that govern unincorporated Riverside County include County Ordinance Number 787, Riverside County Master Fire Protection Plan; CPRC Section 4290, the Uniform Fire Code; and the Uniform Building Code (UBC). The Riverside County General Plan policies refer to the UBC with respect to various aspects of building code requirements. Riverside County adopted the California Building Code and the International Building Code with respect to overall and/or specific building code issues.

Riverside County Airport Land Use Compatibility Plan

Policy 4.3.7 of the Riverside County Airport Land Use Compatibility Plan states, "New land uses that may cause visual, electronic, or increased bird strike hazards to aircraft in flight shall not be permitted within any airport's influence area." Specifically, glare or distracting lights that could be mistaken for airport lights; sources of dust, steam, or smoke that may impair pilot visibility; sources of electrical interference with aircraft communications or navigation; and any proposed use, especially landfills and certain agricultural uses that create an increased attraction

for large flocks of birds should all be avoided (Riverside County Airport Land Use Commission, 2004).

Certified Unified Program Agency

The Certified Unified Program Agency (CUPA) is an agency certified by the Secretary of California's Environmental Protection Agency (Cal/EPA) to conduct the Unified Program. The Unified Program consolidates the administration, permits, inspections, and enforcement activities of the following environmental and emergency management programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Prevention Program; Area Plans for Hazardous Materials Emergencies; Underground Storage Tank Program; Aboveground Petroleum Storage Act Program; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements (Tit. 27 CCR § 15100 et seq.).

The Riverside County Department of Environmental Health is the CUPA with jurisdiction in the area of the Proposed Project.

City of Menifee General Plan

The City of Menifee General Plan (adopted on December 20, 2013) has adopted goals related to hazards and community protection (City of Menifee, 2013). The following goals, defined by the City of Menifee General Plan Safety Element, are related to protection and preservation of the health, safety, and welfare of the community:

- Goals S-1 and S-2 Addresses geologic hazards
- Goal S-3 Addresses flooding hazards
- Goal S-4 Addresses fire hazards
- Goal S-5 Addresses hazardous materials
- Goal S-6 Addresses disaster preparedness

These goals have been considered and incorporated into the Proposed Project's design and implementation where appropriate and feasible.

City of Murrieta General Plan

The City of Murrieta General Plan (adopted on July 19, 2011) has adopted goals related to geologic, seismic, flood, and fire hazards. The Safety Element also addresses hazards created by human activity: hazardous materials and waste, aircraft hazards, and incidents that call for police protection and community protection (City of Murrieta, 2011). The following goals, defined by the City of Murrieta General Plan Safety Element, are related to protection and preservation of the health, safety, and welfare of the community:

- Goal SAF-1 Protect people and properties from natural and man-made hazards
- Goal SAF-2 Minimize damage from geologic and seismic hazards by identifying and addressing these hazards during the planning and engineering of built improvements

- Goal SAF-3 Minimize damage from flood and inundation hazards by improving flood control systems and providing adequate safety protections in areas of the City subject to inundation
- Goal SAF-4 Create land use regulations and emergency response plans to reduce potential damage resulting from dam failure
- Goals SAF-5, SAF-6, and SAF-7 Minimize damage from fire hazards through preventive measures, education, and fire protection services
- Goal SAF-8 Create a community that is protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination
- Goals SAF-9 and SAF-10 Provide high-quality and timely police services to all residents and businesses in Murrieta
- Goal SAF-11 Design the physical environment to promote community safety and reduce opportunities for criminal activity
- Goal SAF-12 Murrieta is prepared to coordinate effective response and recovery efforts for major emergencies

These goals have been considered and incorporated into the Proposed Project's design and implementation where appropriate and feasible.

City of Perris General Plan

The City of Perris has adopted goals for reducing the potential risks for death, injuries, property damage, and economic and social dislocation resulting from hazards or catastrophic events through the General Plan Safety Element (approved on October 25, 2005). The following goals, defined by the City of Perris General Plan Safety Element, are related to protection and preservation of the health, safety, and welfare of the community:

- Goal I Reduced risk of damage to property or loss of life due to a natural or man-made disasters
- Goal II Improved response times for emergency service providers (police, fire, medical services)
- Goal III A citizenry that is well-informed about disaster preparedness and response

These goals have been considered and incorporated into the Proposed Project's design and implementation where appropriate and feasible.

City of Temecula General Plan

The City of Temecula's General Plan Safety Element (updated in 2005) has adopted goals for providing a safe community. Emergency services provided in Temecula under the responsibility and authority of the City, include the following:

- Fire protection (currently contracted to RCFD)
- Paramedic emergency services (currently contracted to RCFD)
- Police (currently contracted to Riverside County Sheriff's Department)

The following goals, defined by the City of Temecula's General Plan Safety Element, are related to identifying and addressing features or characteristics in or near Temecula that represent a potential hazard to community residents, structures, public facilities, and infrastructure:

- Goal 1 Protection from natural hazards associated with geologic instability, seismic events, wild land fires, flooding, and dam failures
- Goal 2 Protection of the public and environmental resources from hazards related to hazardous materials and waste, and nuclear power production
- Goal 3 A safe and secure community free from the threat of personal injury and loss of property
- Goal 4 An effective response of emergency services following a disaster

These goals have been considered and incorporated into the Proposed Project's design and implementation where appropriate and feasible.

4.8.3 Significance Criteria

The significance criteria for assessing the impacts to hazards and hazardous materials come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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 0.25 mile of an existing or proposed school
- Be located on a site that is included on a list of hazardous material sites, compiled pursuant to Government Code Section 65962.5, and as a result would 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 2 miles of a public airport or public use airport, the project would result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area

4.8.4 Impact Analysis

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

Construction

Less Than Significant Impact. No acutely hazardous materials would be used or stored on location during construction of the Proposed Project. Hazardous materials to be used during the construction of the Proposed Project would include gasoline, diesel fuel, oil (including mineral oil), solvents, and lubricants associated with vehicles and construction activities. All transport of hazardous materials would be in compliance with applicable laws, rules, and regulations, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations. As a result, impacts caused by the routine transport and use of hazardous materials would be less than significant.

Before removal of existing poles, existing subtransmission and distribution lines would be transferred to new poles. Depending on the type, condition, and original chemical treatment, the existing wood poles removed for the Proposed Project would be returned to a material staging yard and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, and/or disposed of in the lined portion of a RWQCB-certified landfill.

Although a very low potential would exist for contaminated soil to be encountered during excavation or other ground disturbing activities, if encountered, contaminated soil would be segregated, sampled, and tested to determine appropriate treatment and disposal options. All hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE protocols designed to protect the environment, workers, and the public, as described in Section 3.7.3.1.2, Subtransmission Trenching. If the soil is classified as hazardous, it would be properly managed on location and transported in accordance with the United States Department of Transportation regulations using a Uniform Hazardous Waste Manifest to a Class I Landfill or other appropriate soil treatment or recycling facility. Similarly, there is a very low potential for encountering groundwater during excavation or other ground disturbing activities. No contaminated groundwater underlying the Proposed Project was identified in agency databases[2] or the EDR review. However, if contaminated groundwater is encountered, it would be pumped into a tank and disposed of at an off-site disposal facility in accordance with applicable laws. As discussed in Section 4.9, Hydrology and Water Quality, a geotechnical site assessment and field investigation would be conducted for the Proposed Project prior to the start of construction. See Section 4.9, Hydrology and Water Quality, for additional information regarding geotechnical site assessment and field investigation. All hazardous

[2] The Riverside County Waste Management Department's Supplemental Groundwater and Landfill Gas Assessment, and Landfill Gas Collection System Improvement Workplan (Workplan) was reviewed as part of this analysis (Riverside County Waste Management Department, 2012). According to this Workplan, the closest groundwater well to the Proposed Project and associated with Double Butte is Well DG-3. There is no mention of contamination in Well DG-3 in this Workplan.

materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public. Therefore, less than significant impacts would occur under this criterion as a result of the Proposed Project.

Operation

Less Than Significant Impact. No acutely hazardous materials would be used or stored on location during the Operations and Maintenance (O&M) of the Proposed Project. Hazardous materials to be used during the O&M of the Proposed Project would include gasoline, diesel fuel, oil (including mineral oil), solvents, and lubricants associated with vehicles and O&M activities. All hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public. Therefore, less than significant impacts would occur under this criterion as a result of the Proposed Project.

4.8.4.2 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

Less Than Significant Impact. Construction of the Proposed Project would require the limited use of hazardous materials, such as fuels, oils (including mineral oil), lubricants, and solvents. Because of the low volume and low toxicity of the hazardous materials to be used during construction of the Proposed Project, the potential for environmental impacts from hazardous material incidents would be less than significant. The most likely incidents involving these hazardous materials would be associated with minor spills or drips. Potentially adverse environmental effects of such incidents would be mitigated by thoroughly cleaning up minor spills as soon as they occurred.

Practices described in SWPPP(s) would specify the locations for storage of hazardous materials during construction, as well as protective measures, notifications, and clean-up requirements for any incidental spills or other potential releases of hazardous materials. Any impacts that would result from an accidental release would be addressed through SWPPP(s), and therefore, the impacts would be less than significant. For more information regarding SWPPP(s), refer to Section 4.9, Hydrology and Water Quality.

In addition, implementation of the Worker Environmental Awareness Program, as described in Section 3.9.2, Worker Environmental Awareness Training, would inform construction personnel about the SWPPP(s) and site-specific best management practices. It also would provide instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak from equipment, or the discovery of soil contamination.

During construction activities for the Proposed Project, subsurface utilities (e.g., a natural gas line) may be encountered and damaged, resulting in a release of a hazardous material. As described in Section 3.7.3.1.1, Subtransmission Survey, during construction, such incidents

would be avoided by thoroughly screening for subsurface structures in areas before commencement of subsurface work. Screening activities would include contacting Underground Service Alert (also known as "DigAlert"), visual observations, use of buried line locating equipment, and exploratory excavation (pot holing) as necessary. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. During O&M activities, the Proposed Project would be anticipated to involve the transport, use, and disposal of limited quantities of hazardous materials, including hazardous liquid materials (such as mineral oil). It is anticipated that these events would be infrequent and would largely be associated with maintenance activities. Furthermore, the design of SCE's existing substation provides secondary containment, and/or diversionary structures or equipment that prevents discharge of an oil spill, as described in the existing SPCC Plan. The SPCC Plan would be revised to account for additional on-site mineral oil and would be implemented by SCE. In addition, Proposed Project O&M activities could involve the use of small amounts of hazardous materials such as gasoline, diesel fuel, oil, solvents, and lubricants associated with vehicles. However, given the minor amount of work involved with Proposed Project O&M, the most likely incidents involving these hazardous materials would be associated with extremely minor spills or drips. Potentially adverse environmental effects of such incidents would be mitigated by thoroughly cleaning up minor spills as soon as they occurred. The impact would be less than significant.

4.8.4.3 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

Less Than Significant Impact. Two schools are within 0.25 of a mile of the Proposed 115 kV subtransmission line, and two schools are within 0.25 of a mile from Material Staging Yard 4. Construction of the Proposed Project would result in generation of various waste materials, including wood, metal, soil, vegetation, and sanitation waste (portable toilets). The existing wood poles removed for the Proposed Project would be returned to a staging yard, and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, and/or disposed of in the lined portion of a RWQCB-certified municipal landfill. Material excavated for the Proposed Project would either be used as fill, backfill for new wood poles, wood guy stub poles, LWS poles, TSP footings, or anchors installed for the project, made available for use by the landowner, and/or disposed of off-site at an appropriately licensed waste facility. If contaminated material is encountered during excavation, work would stop at that location and SCE's Spill Response Coordinator would be called to the site to make an assessment and notify the proper authorities.

The minimal quantities of hazardous materials that would be used during Proposed Project construction would make it unlikely that schools or preschools/daycare centers would be impacted by an accidental release of hazardous materials. The impact would be less than significant.

Operation

Less Than Significant Impact. It is anticipated that O&M of the Proposed Project would require the infrequent use of items such as mineral oil or other materials that might be considered hazardous. Any hazardous materials would be stored, handled, and used in accordance with applicable regulations. Due to the infrequent and minimal use of materials that may be considered hazardous or acutely hazardous, and because all applicable regulations would be adhered to, O&M of the Proposed Project would be expected to result in less than significant impacts related to emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, the impact would be less than significant.

4.8.4.4 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?

Construction

No Impact. Based on a query of historical and current use of these lands, several sites historically associated with hazardous materials and wastes were identified near the Proposed Project. However, given a review of these sites, there was no indication that the area of the Proposed Project would be significantly impacted from these historical uses or that a significant potential for contamination occurs along the Proposed Project. Further, no component of the Proposed Project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur under this criterion as a result of the Proposed Project.

Operation

No Impact. Based on a query of historical and current use of these lands, several sites historically associated with hazardous materials and wastes were identified near the Proposed Project. However, given a review of these sites, there was no indication that the area of the Proposed Project would be significantly impacted from these historical uses or that a significant potential for contamination occurs along the Proposed Project. Further, no component of the Proposed Project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur under this criterion as a result of the Proposed Project.

4.8.4.5 For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

Construction

Less Than Significant Impact. French Valley Airport is located approximately 0.45 of a mile west of Segment 2 of the Proposed Project. Additionally, southern portions of Segment 1 of the Proposed Project lie within the Airport Land Use Compatibility Plan Zones B1, C and D for French Valley Airport and northern portions of Segment 2 of the Proposed Project. As described in Section 3.5.2.1, Transmission Poles/Towers, the maximum height of the Proposed 115 kV subtransmission line facilities would be approximately 115 feet (i.e., the height of the TSP). Construction cranes may reach heights of approximately 145 feet for short durations during temporary construction of the TSPs. SCE would file Federal Aviation Administration (FAA) notifications for Proposed Project structures, as required. With respect to Proposed Project structures, the FAA will conduct its own analysis and may recommend no changes to the design of the proposed structures; or may request redesigning the proposed structures near the airports to reduce the height of such structures; or marking the structures, including the addition of aviation lighting; or placement of marker balls on wire spans. SCE would evaluate the FAA recommendations for reasonableness and feasibility, and in accordance with Title 14 Part 77, SCE may petition the FAA for a discretionary review of its determination to address any issues with the FAA determination. FAA agency determinations for permanent structures typically are valid for 18 months, and therefore such notifications would be filed upon completion of final engineering and before construction commenced. The entirety of the Proposed Project area would be built within a combination of existing and newly acquired easements and franchise rights (the "Right-of-Way"), and all construction activities would be performed at a distance from airport activity sufficient to minimize safety concerns to construction personnel. A very low probability of a safety hazard would exist for nearby residents or personnel. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. One public airport is within 2 miles of the Proposed Project. French Valley Airport is located approximately 0.45 of a mile west of Segment 2 of the Proposed Project. O&M of the Proposed Project would include routine inspections, maintenance, and emergency repair. Because personnel would only be present intermittently during O&M, safety hazards resulting from the proximity of this airport to personnel associated with the Proposed Project during O&M would be minor. Therefore, the impact would be less than significant.

4.8.4.6 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?

Construction

Less Than Significant Impact. Two private airstrips and one private helipad are within 2 miles of the Proposed Project: Pines Airpark (approximately 0.55 of a mile east of the Proposed 115 kV subtransmission line), Perris Valley Airport (approximately 0.12 of a mile south of Material Staging Yard 3), and SCE Menifee Service Center Helipad (approximately 0.18 of a mile east of SCE's existing Valley 500/115 kV Substation). The effects of Proposed Project construction on people residing or working in the area of the private airstrip and helipad would be minor. SCE would file FAA notifications for project structures as required. With respect to the proposed project structures, the FAA will conduct its own analysis and may recommend no changes to the design of the proposed structures; or request redesigning the proposed structures near the airports to reduce the height of such structures; or marking the structures, including the addition of aviation lighting; or placement of marker balls on wire spans. SCE would evaluate the FAA recommendations for reasonableness and feasibility, and in accordance with the Title 14 Part 77, SCE may petition the FAA for a discretionary review of its determination to address any issues with the FAA determination. FAA agency determinations for permanent structures typically are valid for 18 months, and therefore such notifications would be filed when final engineering was completed and before construction commenced. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project would include routine inspections, maintenance, and emergency repair. Because personnel would be present only intermittently at the Proposed Project area during O&M, safety hazards resulting from the proximity of airstrips and helipads to personnel associated with the Proposed Project during O&M would be minor. The impact would be less than significant.

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

Construction

Less Than Significant Impact. As discussed in Section 4.16, Transportation and Traffic, the Proposed Project would not be expected to significantly impact traffic circulation or increase demands on existing emergency response services during temporary construction activities, and would not significantly impact emergency access in the area. Although it is not anticipated that construction activities would result in the blockage of any roadways that could be used in the case of an emergency, in the event that any construction-related activity may result in such a blockage or closure, SCE would coordinate with local authorities, including emergency responders regarding appropriate procedures. In the event that any lane closure would be necessary, the Proposed Project would employ a traffic control service, and such lane closures

would be conducted consistent with local ordinances. Therefore, the impacts associated with construction activities would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project would not affect emergency plans or evacuation routes. Every effort would be made by SCE to maintain electrical service during emergencies. O&M of the Proposed 115 kV subtransmission line would not impair the implementation of emergency response or evacuation plans. The impact would be less than significant.

4.8.4.8 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

Less Than Significant Impact. SCE would implement standard fire prevention protocols during construction activities and comply with applicable laws and regulations. Prior to construction, contractors would be required to submit a fire prevention plan to SCE construction management for review and approval. Additional standard protocols would be implemented when the National Weather Service issues a Red Flag Warning, such as measures to address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

In addition to protective measures, fire risks during construction would be low, as only a portion of the Proposed Project would be located within a moderate or very high fire hazard area. The majority of the Proposed Project area is classified as non wildland/non-urban. Portions of the Proposed Project area, located within moderate to high fire hazard areas would be grubbed of vegetation and graded before staging equipment, minimizing the potential for vehicles or equipment to start a fire.

As a result of these measures, construction of the Proposed Project would have a less than significant impact to risk of loss, injury, or death involving wildland fires.

Operation

Less Than Significant Impact. Vegetation (both natural and ornamental) along the Proposed Project would be maintained to eliminate contact with equipment and thus avoid potential for ignition. Consistent with CPUC General Order 95 and other applicable state and federal laws, SCE would maintain an area of cleared brush around the equipment, minimizing the potential for fire. As previously stated SCE participates with CAL FIRE, the California OES, and various city and county fire agencies in the Red Flag Fire Prevention Program and complies with CPRC Sections 4292 and 4293 related to vegetation management. In addition, SCE has standard fire prevention protocols that would be implemented when the National Weather Service issues a Red Flag Warning. These protocols include measures to address smoking and fire rules, storage

and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements. As a result of these measures, O&M of the Proposed Project would have a less than significant impact to risk of loss, injury, or death involving wildland fires.

Pursuant to CPUC's General Order 166, paragraph 'E', SCE would also be required to submit a Fire Prevention Plan prior to construction (See Section 4.8.2, Regulatory Setting, for greater detail). As a result of these measures, O&M of the Proposed Project would have a less than significant impact to risk of loss, injury, or death involving wildland fires.

4.8.5 Applicant Proposed Measures

Because no significant impacts associated with hazards or hazardous materials would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.8.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Three existing schools are within 0.25 of a mile of the Alternative 115 kV subtransmission line, and two schools are within 0.25 of a mile from Material Staging Yard 4, as shown in Table 4.8-3 Schools Located Within 0.25 of a Mile from Segment 1 of the Alternative Project and Figure 4.14-1 Public Services. The Higher Learning Preschool, Kathleen Elliott Equestrian Trainer and Lessons, and Revival Christian Academy would be located closest to Segment 1 of the Alternative Project, although no school facilities would be displaced by Segment 1 of the Alternative Project infrastructure. Similar to the Proposed Project, Segment 1 of the Alternative Project would generally follow existing roads and would not induce growth or create the need for new or physically altered public services. Segment 1 of the Alternative Project's location would be within the jurisdiction of the same public service providers (fire, police, emergency services, and other public facilities) as the Proposed Project, and impacts are expected to be less than significant.

Table 4.8-3 Schools Located Within 0.25 of a Mile from Segment 1 of the Alternative Project

Number on Map[1]	School Name	School Address	Proximity to Segment 1 of the Alternative Project (Miles)[2]
20	Revival Christian Academy	29220 Scott Road, Menifee, CA 92584	0.05
21	Higher Learning Preschool	29118 Emerald Circle, Menifee, CA 92584	0.1
22	Kathleen Elliott Equestrian Trainer and Lessons	28981 Tulita Lane, Menifee, CA 92584	0.02

Notes:

[1] Map numbers correspond to Figure 4.14-1, Public Services. Schools shown in this figure include public and private schools, daycares, preschools, and colleges/universities.

[2] The distance measurements of Oliver Christian School Center and Romoland Elementary School were taken from potential Material Staging Yard 4, given the close proximity of this site to these schools. Oliver Christian School (Number 1 on Figure 4.14-1) is 0.21 of a mile from Material Staging Yard 4 and Romoland Elementary School (Number 2 on Figure 4.14-1) is 0.24 of a mile from Material Staging Yard 4.

Sources: Google Earth, Pro, 2012 and 2014; Google Maps, 2013; data compiled by AECOM in 2012, 2013 and 2014

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

No schools were identified within 0.25 of a mile of Segment 2 of the Alternative Project. Similar to the Proposed Project, Segment 2 of the Alternative Project would generally follow existing roads and would not induce growth or create the need for new or physically altered public services. As stated above, Segment 2 of the Alternative Project's location would be within the jurisdiction of the same public service providers (fire, police, emergency services, and other public facilities) as the Proposed Project, and impacts are expected to be less than significant.

An EDR DataMap Corridor Study (2014) was reviewed for the Alternative Project. Nine additional sites were identified along the alignment of the Alternative Project where it differs from the Proposed Project. Based on review of the EDR Corridor Study, there is low potential for contaminated media, including groundwater and soils within the areas of these sites. Therefore, the location and presence of these sites would not result in potential environmental concerns during construction or O&M.

Because the Alternative 115 kV subtransmission line would be approximately 4 miles longer than the Proposed 115 kV subtransmission line, it would be located in closer proximity to a greater number of sensitive receptors (e.g., residences and schools). Therefore, construction and O&M impacts related to hazards and hazardous materials would be incrementally greater for the Alternative Project. However, SCE would maintain compliance with existing procedures and regulatory requirements for proper handling, storage, and disposal of hazardous materials used during construction and O&M. Therefore, impacts for the Alternative Project would be less than significant.

4.8.7 References

California Department of Forestry and Fire Protection (CAL FIRE). 2007 (November). Fire Resource Area Protection. Available: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.php. Accessed December 2012.

———. 2011. Riverside Unit Pre-Fire Management Plan. Available: http://cdfdata.fire.ca.gov/fire_er/fpp_planning_plans_details?plan_id=121. Accessed June 2012.

———. 2012. Riverside Unit 2012 Strategic Fire Plan. Available: http://cdfdata.fire.ca.gov/fire_er/fpp_planning_plans_details?plan_id=152. Accessed April 2013.

CPUC. 2012. General Order Index Page. Available: http://www.cpuc.ca.gov/puc/documents/go.htm. Accessed February 2013.

City of Menifee. 2013. City of Menifee General Plan. Available: http://cityofmenifee.us/index.aspx?NID=221. Accessed April 2014

City of Murrieta. 2008 (June). Emergency Operations Plan.

———. 2011. City of Murrieta General Plan Safety Element. Available: http://www.murrieta.org/cityhall/planning/general.asp. Accessed May 2014.

City of Murrieta Fire Department. 2012. About the Murrieta Fire Department. Available: http://www.murrieta.org/services/fire/info/about.asp. Accessed June 2012.

City of Temecula. 2005. City of Temecula General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014.

Environmental Data Resources Inc. (EDR). 2014. EDR DataMap for Corridor Study of Winchester, CA. Inquiry Number 03933623.5r. Requested May 9, 2014.

Google Earth, Pro. 2012. "Valley South 115 kilovolt (kV) Subtransmission Project." Accessed November 11, 2013.

Riverside County Airport Land Use Commission. 2004. Amended: 2011. New Compatibility Plan. Available: http://www.rcaluc.org/plan_new.asp. Accessed June 2014.

Riverside County Fire Department (RCFD). Office of Emergency Services. 2005 (March). Riverside County Operational Area, Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). Available: http://www.rvcfire.org/opencms/functions/oes/EmergencyManagement/PlansandPublications/. Accessed June 2012.

———. 2006 (February). Riverside County Operational Area, Emergency Operations Plan (EOP). Available: http://www.rvcfire.org/opencms/functions/oes/EmergencyManagement/PlansandPublications/. Accessed June 2012.

———. 2009. Riverside County Fire Department Strategic Plan 2009-2029. Prepared by Management Partners Incorporated. Available: http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf. Accessed April 2014.

———. 2013. Emergency Command Center. Available: http://www.rvcfire.org/stationsAndFunctions/OpsSppt/ECC/Pages/ECC-Scope.aspx. Accessed February 2013

Riverside County Waste Management Department. 2012. Supplemental Groundwater and Landfill Gas Assessment, and Landfill Gas Collection System Improvement Workplan. Available: http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7459882616/L10004864228.PDF. Accessed May 2014.

Section 4.9
Hydrology and Water Quality

4.9 Hydrology and Water Quality

This section describes hydrology and water quality in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.9.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

Access to all Proposed Project components would be directly from existing public roads or existing SCE access roads with the exception of one proposed pole location along Leon Road, where some access road design is proposed and would require a new easement. For more details on this access road see Section 3.7.1.3, Access Roads and/or Spur Roads.

The pulling, tensioning, and splicing set-up locations associated with the Proposed Project would be temporary and the land would be restored to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE, following completion of pulling, tensioning, and splicing activities. The set-up locations require level areas to allow for maneuvering of the equipment and, when possible, these locations would be located on existing roads and level areas to minimize the need for grading and cleanup. Approximately 40 set-up locations are currently proposed. The final number and location of these sites would be determined upon final engineering.

The following is a description of surface waters, floodplains, and groundwater near the Proposed Project.

4.9.1.1 Surface Water

The Proposed Project is located in the Santa Ana River Basin Watershed and the San Diego Basin Watershed, which are under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB) and the San Diego Regional Water Quality Control Board (SDRWQCB), respectively (California Biodiversity Council, 2008). Approximately 45 percent of the Proposed Project is located within the SARWQCB, while the remaining 55 percent is within SDRWQCB jurisdiction. The portion of the Proposed Project within the Santa Ana River Basin Watershed is located in the San Jacinto Valley Hydrologic Unit, within the Perris Hydrologic Area (SARWQCB, 2011). The San Jacinto Watershed covers 765 square miles, draining the northwestern corner of Riverside County (DWR, 2010a).

Within the San Diego Basin Watershed, the Proposed Project is located in the Santa Margarita Hydrologic Unit, which covers about 750 square miles and is drained largely by the Santa Margarita River, Murrieta Creek, and Temecula River (SDRWQCB, 2007).

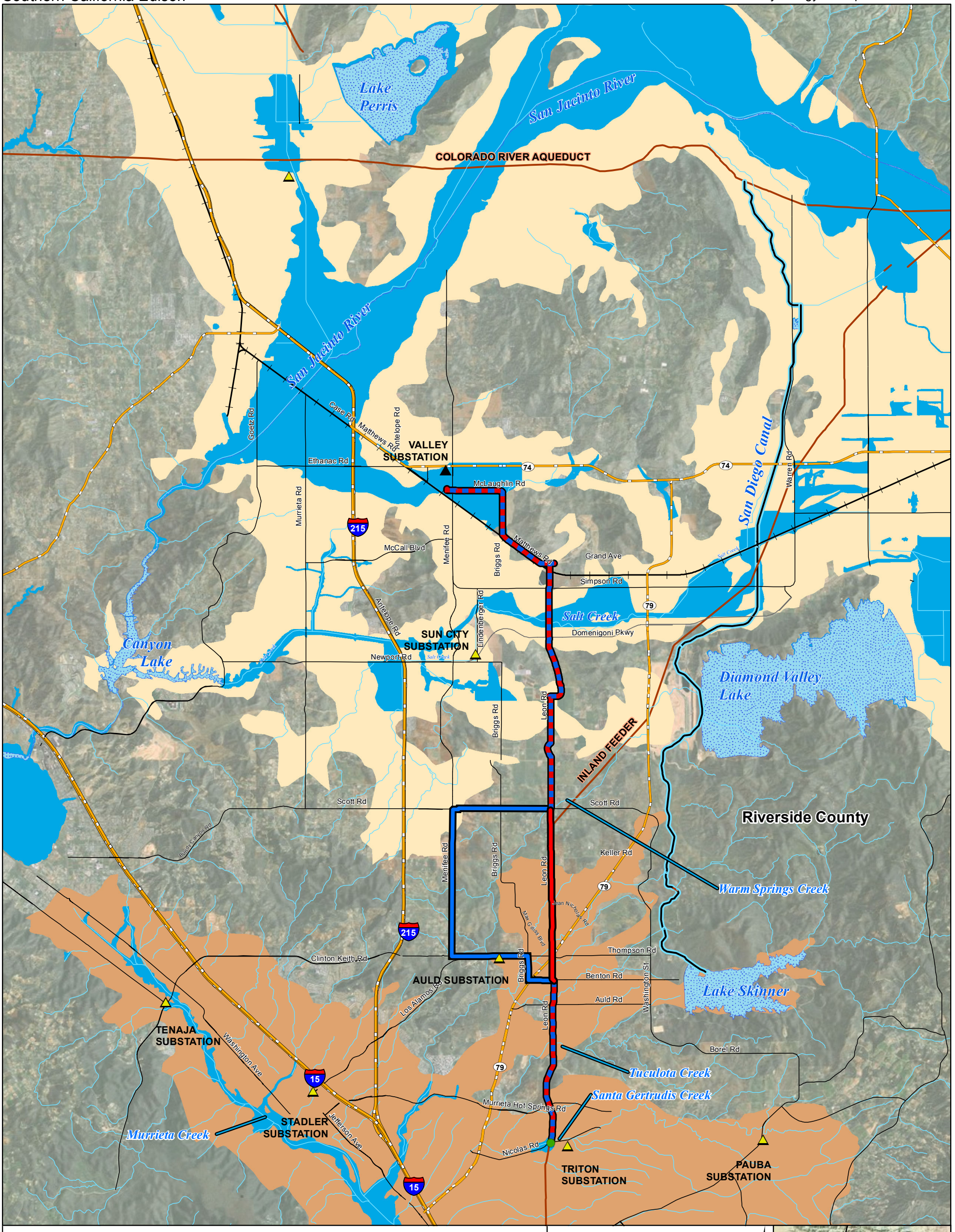
The area has a typical Mediterranean climate, with wet, cool winters and warm, dry summers. Most of the rainfall occurs between December and March, with an average annual rainfall in Winchester (located in west-central Riverside County) of 11.4 inches (IDcide, 2012). The wettest month of the year is February, with an average rainfall of 2.86 inches.

Topography across the Proposed Project is predominantly flat, with elevation ranging from approximately 1,400 to 1,160 feet above mean sea level. Drainage along the Proposed Project flows either to surface drainage ditches that run adjacent to the roadway (for portions of the work areas adjacent to roadways) or sheet flows to the closest drainage ways (streams or creeks) in undeveloped areas where no drainage conveyance exists.

The Proposed Project is located approximately 28 miles east of the Pacific Ocean at its closest point. Segment 1 of the Proposed Project traverses Salt Creek, a small ephemeral stream that merges with the San Jacinto River at Canyon Lake (see Figure 4.9-1 Hydrology and Floodplain Boundaries). Salt Creek is a natural drainage that has been widely channelized for flood control and is one of the main tributaries to Canyon Lake. Salt Creek is not listed on the Clean Water Act (CWA) Section 303(d) list of impaired water bodies. Segment 1 of the Proposed Project also traverses Warm Springs Creek, a tributary of Murrieta Creek that connects to the Pacific Ocean via the Santa Margarita River. Impairments on the CWA Section 303(d) list identified for Warm Springs Creek include chlorpyrifos, *Escherichia coli* (E. coli), fecal coliform, iron, manganese, phosphorus, and total nitrogen (which includes ammonia, organic and reduced nitrogen, and nitrate-nitrate) (SWRCB, 2010b).

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.9-1**

Southern California Edison Hydrology Floodplain Boundaries



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP

Hydrology
- Stream / River
- Canal
- Pipeline
- Waterbodies
- 100-year Floodplain
- Temecula Valley Groundwater Basin
- San Jacinto Groundwater Basin

Sources: SCE, 2014; Riverside County, 2014; FEMA, 2014
Aerial Image: Provided by ESRI, 2014

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Chapter 4

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Segment 2 of the Proposed Project would cross Tucalota Creek at the intersection of Leon Road and Borel Road and would cross Santa Gertrudis Creek at Nicolas Road. Downstream receiving waters, Murrieta Creek, ultimately connects to the Pacific Ocean via the Santa Margarita River. Impairments identified for Santa Gertrudis Creek include chlorpyrifos, copper, E. coli, fecal coliform, iron, manganese, phosphorus, and total nitrogen (which includes ammonia, organic and reduced nitrogen, and nitrate-nitrate) (SWRCB, 2010b).

The Proposed Project is also located to the south and east of the San Jacinto River. Although the Proposed Project does not cross or drain to the San Jacinto River, the northern extent of the Proposed Project area would be subject to potential flooding from the San Jacinto River and its tributaries, as shown in Figure 4.9-1 Hydrology and Floodplain Boundaries. The San Jacinto River originates in the San Jacinto Mountains in San Bernardino National Forest and flows through Canyon Lake to Lake Elsinore. In the Proposed Project vicinity, the San Jacinto River is ephemeral, primarily flowing during storm events that occur in the watershed in the winter. Historically, the San Jacinto River keeps all the groundwater basins in that part of the region full of fresh water. Now, essentially no surface flow exists beyond the mouth of the canyon, where it exits the mountains; the riverbed typically is dry (SARWQCB, 2011).

An Integrated Regional Watershed Management Plan (IRWMP) was completed for the San Jacinto River in 2007. The IRWMP includes a strategy that incorporates multi-objective projects for stormwater and flood management and includes goals of protecting impaired water bodies, including Lake Elsinore and Canyon Lake (SJRWC, 2007).

Diamond Valley Lake and Lake Skinner (also known as Skinner Reservoir) are both constructed reservoirs that are located approximately 2.9 and 2.6 miles due east of the Proposed Project, respectively. Diamond Valley Lake is an off-stream reservoir with 800,000-acre-foot capacity that supplies water to southern California to meet peak summer, drought, and emergency needs. Diamond Valley Lake was constructed by the Metropolitan Water District of Southern California (MWD) and was completed in 2003. This lake is filled by the Inland Feeder, which is a 44-mile water conveyance system that connects the State Water Project (SWP) to the Colorado River Aqueduct and Diamond Valley Lake. Diamond Valley Lake has three earthen dams, two on either side of the valley and one on the south rim.

Lake Skinner was constructed in 1973 and was further expanded in 1991, for a current capacity of 44,000 acre-feet. Surrounding the lake is Lake Skinner Regional Park and a water filtration facility. Lake Skinner is operated by Riverside County Regional Park and Open-Space District, under lease by MWD. The lake is supplied by the Colorado River Aqueduct and the SWP, and feeds the Robert A. Skinner Filtration Plant, which provides treated water to 2.5 million people in Riverside and San Diego counties.

San Diego Canal/Aqueduct runs from north to south and intersects the western end of Diamond Valley Lake. Its function is to transport SWP water as well as Colorado River water to Lake Skinner, where the canal ends (Riverside County, 2003). From that point, deliveries are made to MWD's member agencies in southern Riverside County and San Diego County via a system of pipelines.

Canyon Lake, also known as Railroad Canyon Reservoir, is located approximately 8.4 miles west of the Proposed Project. The reservoir was created in 1928 and has a storage capacity of 11,586 acre-feet. It is owned and operated by the Elsinore Valley Municipal Water District.

Lake Elsinore is the primary natural lake within the watershed and is located approximately 12 miles west of the Proposed Project. Lake Elsinore and Canyon Lake are both included on the CWA Section 303(d) list of impaired water bodies. Impairments identified for these water bodies include polychlorinated biphenyls and toxicity in Lake Elsinore, and pathogens in Canyon Lake (SWRCB, 2010b). A total maximum daily load (TMDL) has been approved by the United States. Environmental Protection Agency (USEPA) to address nutrients in both Lake Elsinore and Canyon Lake.

Lake Perris is located approximately 7.3 miles northwest of the Proposed Project. It was constructed by the California Department of Water Resources (DWR) in 1972. It is the southernmost reservoir in the SWP that provides drinking water to southern California residents (DWR, 2010b). Water from the lake discharges through a 12.5-foot-diameter horizontal tunnel and is conveyed to the MWD's delivery facility, which is just southwest of the eastern dam abutment. In 2005, DWR identified potential seismic safety risks in a section of Perris Dam's foundation. Although no imminent threat exists to public safety, in 2009 the state determined that it was necessary to lower the lake's water level while additional analysis was performed and remedial alternatives were examined. DWR completed the dam remediation design in February 2014, and construction is anticipated to begin in the summer of 2014. Completion of the dam remediation construction is expected at the end of 2017 (DWR, 2014). The Perris Dam inundation area extends approximately 1.8 miles to the northwest of the Proposed Project, close to the intersection of Interstate 215 (I-215) and State Route (SR) 74.

Additionally, the Eastern Municipal Water District's Winchester Recycled Water Storage Ponds are located on the northwest corner of the intersection of Simpson Road and Leon Road, in the unincorporated town of Winchester, Riverside County. These existing three ponds have a combined storage capacity of approximately 550 million gallons (≈1,687 acre-feet) and a surface area of approximately 95 acres (EMWD, 2012a). Proposed expansion and optimization projects at the facility would add approximately 185 million gallons of storage at the site. It is anticipated that construction would commence on August 1, 2014, and be completed by January 31, 2016.

4.9.1.1.1 Santa Ana Regional Water Quality Control Board Basin Plan

The SARWQCB Basin Plan is one of several Water Quality Control Plans (Basin Plans), each administered by the respective Regional Water Quality Control Board (RWQCB). As presented in Table 4.9-1 Basin Plan Beneficial Uses, Basin Plans identify beneficial uses for surface water bodies and groundwater basins as part of water quality planning.

Table 4.9-1 Basin Plan Beneficial Uses

Basin Plan	Waterbody	Beneficial Uses
SARWQCB Basin Plan	Salt Creek	Contact Water Recreation (REC1)[3], Non-contact Water Recreation (REC2)[3], Warm Freshwater Habitat (WARM)[3], Wildlife Habitat (WILD)[3]
	San Jacinto River Reach 3	Agricultural Supply (AGR)[3], Ground Water Recharge (GWR)[3], REC1[3], REC2[3], WARM[3], WILD[3]
	Canyon Lake	Municipal and Domestic Supply (MUN), AGR, GWR, REC1, REC2, WARM, WILD
	Lake Elsinore	REC1, REC2, WARM, WILD
SDRWQCB Basin Plan	Lake Skinner	MUN, AGR, Industrial Service Supply (IND), Industrial Process Supply (PROC), GWR[1], REC1[2], REC2, WARM, WILD
	Diamond Valley Lake	MUN, AGR, IND, PROC, GWR, REC1[2], REC2, WARM, Cold Freshwater Habitat (COLD), WILD, Hydropower Generation (POW)
	Warm Springs Creek	MUN, AGR, IND, PROC, REC1[1], REC2, WARM, WILD
	Tucalota Creek	MUN, AGR, IND, PROC, GWR[1], REC1, REC2, WARM, WILD
	Santa Gertrudis Creek	MUN, AGR, IND, PROC, GWR[1], REC1, REC2, WARM, WILD

Notes:

[1] Potential Beneficial Use

[2] Fishing from shore or boat permitted, but other water contact recreational uses are prohibited.

[3] Intermittent Beneficial Use

Source: SARWQCB, 2014: Table 3-1; SDRWQCB, 2007: Table 2-4.

The SARWQCB Basin Plan for the Santa Ana River Basin (Region 8) identifies beneficial uses for Salt Creek, intermittent beneficial uses for San Jacinto River Reach 3 (Canyon Lake to Nuevo Road), and present or potential beneficial uses for Canyon Lake and Lake Elsinore (see Table 4.9-1 Basin Plan Beneficial Uses). The Basin Plan also indicates that Salt Creek has been specifically removed from municipal and domestic supply beneficial use, in accordance with the

criteria specified in the Sources of Drinking Water Policy (SARWQCB, 2011: Table 3-1). San Jacinto River Reach 3 and Lake Elsinore are excepted from municipal and domestic supply use.

4.9.1.1.2 San Diego Regional Water Quality Control Board Basin Plan

The SDRWQCB Basin Plan for the San Diego River Basin (Region 9) identifies existing and potential beneficial uses for Lake Skinner, Diamond Valley Lake, Tucalota Creek, and Santa Gertrudis Creek (see Table 4.9-1 Basin Plan Beneficial Uses). Groundwater recharge is not a listed beneficial use for either Tucalota Creek or Santa Gertrudis Creek (SDRWQCB, 2011: Table 2-2).

4.9.1.2 Floodplains

Flood zones for the 100-year flood (Flood Zone A) are mapped on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM). The major floodplains in the Proposed Project vicinity, which are mapped as Flood Zone A, are those associated with the San Jacinto River and Salt Creek to the north, and Santa Gertrudis Creek to the south. The existing Valley 500/115 kV Substation and the northern-most portion of Segment 1 of the Proposed Project along a private road (SCE access road/farm road) and Briggs Road are mapped within the FEMA identified 100-year flood zone associated with the San Jacinto River. In addition, a small section of Segment 1 of the Proposed Project in between Simpson Road and Domenigoni Parkway is mapped as being within the 100-year flood zone associated with Salt Creek. Finally, a small area of Segment 2 of the Proposed Project adjacent to the Terminal TSP at Nicolas Road is mapped as being within the 100-year flood zone associated with potential flooding along Santa Gertrudis Creek (see Figure 4.9-1 Hydrology and Floodplain Boundaries). Material Staging Yard 3 is located northwest of the San Jacinto River on the edge of the 100-year flood zone, near the intersection of Case Road and Goetz Road.

Levees along the San Jacinto River reduces the extent of the 100-year flood zone. Regional flood management planning and facility construction are managed by the Riverside County Flood Control and Water Conservation District (RCFCWCD). RCFCWCD also is responsible for the maintenance and operation of flood management facilities, which include debris dams, storm channels, and storm drains.

As described previously, the Perris Dam inundation area extends approximately 1.8 miles to the northwest of the Proposed Project, close to the intersection of I-215 and SR-74.

According to the City of Temecula's General Plan, a portion of the Proposed Project along Leon Road (from Thompson Road to Auld Road) and a small section along Segment 2 of the Proposed Project along Leon Road near the intersection of Allen Road is located within the dam inundation area of Lake Skinner (City of Temecula, 2005). In addition, a portion of the Proposed Project near the Leon Road and Benton Road intersection, west of Lake Skinner, is mapped in the Riverside County General Plan as a high dam hazard zone (Riverside County, 2008). The Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan, approved by FEMA in March 2005, also shows a dam inundation risk area west and north of Diamond Valley Lake (Riverside County, 2005; City of Murrieta, 2011).

4.9.1.3 Groundwater

The Proposed Project is located in the South Coast Hydrological Region. The South Coast Hydrological Region covers approximately 6.78 million acres of the southern California watershed that drains to the Pacific Ocean. The Proposed Project crosses two groundwater basins: San Jacinto Groundwater Basin and Temecula Valley Groundwater Basin. These non-contiguous basins are illustrated on Figure 4.9-1 Hydrology and Floodplain Boundaries and their relationship to the Proposed Project is described below.

San Jacinto Groundwater Basin

Portions of Segment 1 of the Proposed Project north of Craig Avenue are located in the San Jacinto Groundwater Basin, which underlies the San Jacinto, Perris, Moreno, and Menifee Valleys (see Figure 4.9-1 Hydrology and Floodplain Boundaries). The San Jacinto Groundwater Basin is bounded by the San Jacinto Mountains on the east, the San Timoteo Badlands on the northeast, the Box Mountains on the north, the Santa Rosa Hills and Bell Mountains on the south, and unnamed hills on the west.

Water in the San Jacinto Groundwater Basin historically has been of good quality for domestic, irrigation, and industrial purposes. Groundwater quality in the San Jacinto Basin, in terms of the concentration of dissolved minerals, varies with the recharge source (e.g., mountain runoff, excess irrigation). In 2002, total dissolved solid (TDS) content in the basin ranged from 230 to 12,580 milligrams per liter (mg/L), and nitrate-nitrogen concentrations exceeding 10 mg/L were found throughout most of the basin (DWR, 2006). Potential sources of nitrate in the basin are the infiltration of water affected by agricultural practices and wastewater from animal feeding facilities, septic tanks, and municipal wastewater treatment plants (USGS, 2010). TDS concentrations in water from wells in the Perris South and Menifee subbasins (where Valley 500/115 kV Substation is located), which are furthest from major sources of mountain-front recharge, were mostly greater than 1,000 mg/L in 2006 (USGS, 2010). Although pesticides and volatile organic compounds (VOC) were detected in groundwater samples taken in 2006, they were found to be well below applicable drinking water standards (USGS, 2010). Pesticides and VOCs were detected more frequently in water from shallower wells than in water from deeper wells.

Natural recharge to the San Jacinto Groundwater Basin is primarily by percolation of flow in the San Jacinto River and its tributary streams. A lesser source of recharge is the infiltration of rainfall on the valley floor. Natural recharge is augmented by the SWP and by percolation of reclaimed water through infiltration ponds in the upper reaches of the San Jacinto River (DWR, 2006). Percolation of water stored in Lake Perris has been an additional source of recharge since the 1970s, and in years with low precipitation, artificial recharge can exceed natural recharge. Groundwater level trends have varied over the years. In 2001 and 2002, levels generally rose in the central part of the basin and declined in the northeastern and southern parts (DWR, 2006).

Interpreting available groundwater contours data (EMWD, 2012b) indicates that depth to groundwater in the vicinity of the Proposed Project ranges from 19 feet to 61 feet below ground surface. It should be noted that the Proposed Project does not require the installation of any groundwater wells for its construction or operation.

Temecula Valley Groundwater Basin

Portions of the Proposed Project south of Craig Avenue and north of Hilton Road are not associated with an underlying groundwater basin. However, portions of Segment 1 of the Proposed Project that are south of Hilton Road, and portions of Segment 2 of the Proposed Project are located within the Temecula Valley Groundwater Basin. The Temecula Valley Groundwater Basin underlies Murrieta, Temecula, Pauba, Long, and Lancaster Valleys in southwestern Riverside County and a portion of northern San Diego County (see Figure 4.9-1 Hydrology and Floodplain Boundaries). Like the San Jacinto Groundwater Basin, this basin also is located within the larger South Coast Hydrologic Region, as designated by DWR. Non-water-bearing crystalline rocks bound this basin. Natural recharge of the basin is from direct precipitation and percolation in the Warm Springs, Tucalota, Santa Gertrudis, Murrieta, and Pechanga creeks and the Temecula River (DWR, 2004). Groundwater in this basin is rated as being inferior for domestic use because of high nitrate or fluoride content.

DWR completed the Perris Dam Remediation Groundwater Study in August 2006, which evaluated the quantity of seepage from Perris Reservoir and its effects on adjacent groundwater basins. The study concluded that seepage through the underlying Perris Dam alluvium resulted in an approximate 100-foot average rise in the downstream groundwater table, and that the groundwater storage volume of the basin has substantially increased since the lake was filled in the 1970s (DWR, 2010b).

Liquefaction susceptibility data shown in Figure 4.6-4 Liquefaction Susceptibility in Section 4.6 Geology and Soils, indicates that Segment 1 of the Proposed Project, south of Holland Road, and the entirety of Segment 2 of the Proposed Project are located in areas with moderate to very low susceptibility for liquefaction. Thus, inferring that based on the physical properties of geologic units underlying these segments have very low (e.g., coarse gravel) to moderate (e.g., poorly sorted sand and silt) liquefaction susceptibility, in combination with presence or absence of shallow groundwater (approximate depth to groundwater is most-likely greater than 50 feet below the ground surface). Geotechnical studies would be conducted for new TSP foundation locations; however, geotechnical studies would not be required for the installation of wood or light weight steel (LWS) poles because the depth of the poles are approximately 10 to 12 feet.

The SARWQCB's Basin Plan identifies beneficial uses of Groundwater Management Zones that relate to northern portions of Segment 1 of the Proposed Project. The Perris South zone has beneficial uses for municipal and domestic supply and agricultural supply, and the Menifee zone has beneficial uses for municipal and domestic supply, agricultural supply, and industrial process supply (SARWQCB, 2014: Table 3-1). The SDRWQCB's Basin Plan also identifies beneficial uses of groundwater management zones that relate to southern portions of Segment 1 of the Proposed Project and all of Segment 2 of the Proposed Project, which are located in the Santa Margarita Hydrologic Unit and the Murrieta and Auld Hydrologic Areas. Beneficial uses include municipal and domestic, agricultural, industrial service supply and industrial process supply (SDRWQCB, 2007: Table 2-5).

4.9.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.9.2.1 Federal

Clean Water Act

The federal CWA, as amended by the Water Quality Act of 1987, regulates water quality in the United States. 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 (USEPA, 2012).

In 1972, the CWA was amended to specify that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. USEPA has authorized the State Water Resources Control Board (SWRCB) to implement this program in California. Major sections of the CWA and their regulatory requirements are described below.

Section 303

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States, based on the waterbody's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards typically are numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Water quality standards applicable to the Proposed Project are listed in the Basin Plans.

The CWA Section 303(d) list of impaired water bodies includes waters that do not meet water quality standards necessary to support a waterway's beneficial uses, even after the minimum required levels of pollution control technology have been installed. Listed water bodies are to be priority ranked for development of a TMDL. A TMDL is a calculation of the "amount" of a pollutant that a water body can receive on a daily basis and still safely meet water quality standards. TMDLs include waste load allocations for urban stormwater runoff as well as municipal and industrial wastewater discharges, with allocations apportioned for individual municipal separate storm sewer systems (MS4s) and wastewater treatment plants. The State Water Resources Control Board (SWRCB), RWQCBs, and USEPA are responsible for establishing TMDL waste load allocations and incorporating approved TMDLs into water quality control plans, NPDES permits, and waste discharge requirements (WDRs), in accordance with a specified schedule for completion.

Section 401

Under CWA Section 401, applicants requiring a CWA Section 404 permit, or other federal permit or license for any activity that may result in a discharge into jurisdictional waters of the United States must obtain a water quality certification from the state. With oversight by the SWRCB, the RWQCBs implement the Section 401 certification program. When projects span multiple RWQCB boundaries, the SWRCB may assume oversight and permitting responsibility.

Section 402

The NPDES stormwater permitting program, under Section 402(d) of the federal CWA, is administered by the SWRCB on behalf of USEPA. Section 402(d) of the CWA establishes a framework for regulating nonpoint source stormwater discharges (33 U.S.C. § 1251). The NPDES program's objective is to control and reduce pollutants to waterbodies from surface water discharges, which includes municipal and industrial wastewater as well as stormwater runoff. Under the CWA, discharges of pollutants to receiving water are prohibited unless the discharge is in compliance with an NPDES permit. An NPDES permit specifies discharge prohibitions, effluent limitations, and other provisions, such as monitoring deemed necessary to protect water quality based on criteria specified in the National Toxics Rule, the California Toxics Rule, and the Basin Plan.

Section 404

Under Section 404, the United States Army Corps of Engineers (USACE) and USEPA regulate the discharge of dredged or fill material into "waters of the United States." Under Section 404, the phrase "waters of the United States" includes wetland and non-wetland aquatic habitats within the jurisdictional extent of rivers and streams defined by the ordinary high water mark. Such discharges may result from navigational dredging, flood control channelization, levee construction, channel clearing, fill of wetlands for development, or other activities. Projects that involve the removal or placement of soil, sediment, and other materials in or near waterbodies require CWA Section 404 permit authorizations from USACE. See Section 4.4, Biological Resources, for a further discussion of waters of the United States.

Federal Emergency Management Agency—National Flood Insurance Program and Flood Disaster Protection Act

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 were enacted to reduce the need for flood protection structures and to limit disaster relief costs by restricting development in floodplains (FEMA, 1997). FEMA, created in 1979, is responsible for predicting hazards related to flooding events and forecasting the level of inundation under various conditions. As part of its duty to develop standards for delineating fluvial and coastal floodplains, FEMA provides information about flood hazard and inundation potential on FIRMs, and where appropriate, designates regions as special flood hazard areas. Special flood hazard areas are defined as areas that have a one percent chance of flooding in a given year.

FEMA also administers the National Flood Insurance Program (NFIP), a federal program that enables property owners in participating communities to purchase insurance as protection against

flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

Within the floodplain, non-residential development is allowed. Construction activities are restricted within flood hazard areas, depending on the potential for flooding identified within a specific area. Title 44, Part 60 of the Code of Federal Regulations (CFR) requires that municipalities participating in the NFIP adopt specific standards to reduce flood hazards by regulating construction and development activities within designated 100-year flood hazard areas.

4.9.2.2 State

California Porter-Cologne Water Quality Control Act

The California Porter-Cologne Water Quality Control Act (Porter-Cologne Act) designated the SWRCB as the ultimate authority over state water rights and water quality policy, and also established nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level (SWRCB, 2013). The SWRCB has the responsibility of granting NPDES permits for stormwater runoff from construction sites. The RWQCB regulates the discharge of waste to any waters of the State by issuing WDRs. WDRs may be required for any discharges to non-federal waters not subject to regulation under Sections 404/401 of the CWA.

Statewide Construction General Permit Order No. 2009-0009-DWQ

On September 2, 2009, the State Water Resources Control Board (SWRCB) adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit[CGP]), Order No. 2009-0009-Division of Water Quality (DWQ) as amended by 2010-0014-DWQ and 2012-0006-DWQ, for projects disturbing 1 or more acres of land, or that are part of a common plan of development or sale that disturbs more than 1 acre of land where the rainfall erosivity waiver does not apply. The new permit became effective on July 1, 2010, whereby all existing dischargers and new dischargers are required to obtain coverage under the new permit by submitting Permit Registration Documents. The CGP technically expires on September 2, 2014, but will remain in effect until the adoption of a new permit. The SWRCB has indicated the formal draft for public review and comment will be released in 2015.

The CGP includes special provisions for Linear Underground/Overhead Projects (LUP), which includes any cable line or wire for the transmission of electrical energy, any cable line or wire communications, and associated ancillary facilities including towers, poles, and substations. Since the Proposed Project is associated with a linear portion, LUP provisions would apply. LUP requirements are outlined in Attachment A of the CGP (SWRCB, 2010c).

<u>Storm Water Pollution Prevention Plans</u>

The CGP requires the implementation of a SWPPP, which must be prepared before construction begins and kept on site throughout the construction process. In accordance with the CGP, the SWPPP must include the following:

- Identification of pollutant sources and non-stormwater discharges associated with construction activity;
- Specifications for best management practices (BMPs) that would be implemented during project construction to minimize the potential for accidental releases and runoff from the construction areas, including temporary construction yards, pull sites, and other temporary work areas;
- Calculations and design details, as well as BMP controls for site run-on;
- BMPs used to eliminate or reduce pollutants after construction is complete; and
- Certification from a Qualified SWPPP Developer.

The CGP requires that the site sediment risk be calculated based on rainfall, soil erodibility, and slope. It also requires that the receiving water risk be calculated based on whether the disturbed areas discharge to a 303(d)-listed water body that is impaired for sediment or that has a U.S. EPA-approved TMDL implementation plan for sediment. The receiving water risk must also be calculated based on whether the disturbed areas discharge to a waterbody with a beneficial use of fish spawning, cold freshwater habitat, and fish migration. The result of this analysis determines the combined risk level or type (i.e., 1, 2, or 3), which dictates the monitoring and reporting requirements.

Vault Dewatering Permit Order No. 2006-0008-DWQ

The SWRCB adopted the Statewide General NPDES Permit for Discharges from Utility Vaults & Underground Structures to Surface Waters (General Permit CAG990002) on July 19, 2006. This permit authorizes permittees to have short term intermittent discharges of uncontaminated water from vaults and substructures to waters of the United States during the operational phase of projects.

The Utility Vault General Permit has been revised and contains additional requirements. The new Utility Vault General Permit (2014-XXXX-DWQ) was adopted on October 21, 2014 and will be implemented on July 1, 2015.

Waste Discharge Requirement

If a discharge of water, other than stormwater (such as construction dewatering) occurs within the jurisdiction of the SARWQCB, a WDR must be submitted. Within the jurisdiction of the SDRWQCB, a waiver to file a Report of Waste Discharge (RoWD) can be granted or a WDR issued before initiating a discharge to surface waters not subject to federal NPDES regulations. Specifically, Section 13269 of the Porter-Cologne Act gives the SDRWQCB the authority to waive the requirements of Sections 13260(a) and (c), 13263(a), and 13264(a) for specific discharges or specific types of discharge, provided the waiver is consistent with the Basin Plan for the San Diego Basin and is in the public interest. Discharges that comply with the conditions of a waiver are expected to pose a low threat to the quality of waters of the state. Dischargers must comply with the waiver conditions to be eligible for a waiver of the requirement to file a

RoWD and/or issuance of WDRs. Dischargers that cannot comply with the waiver conditions must file a RoWD with the SDRWQCB.

Discharges from short-term construction dewatering operations to land may be eligible for Conditional Waiver No. 2. Conditional Waiver No. 2 is for "low threat" discharges to land that can percolate to groundwater. "Low threat" discharges include liquid wastes containing pollutant concentrations that are not expected to adversely impact the quality of waters of the state under ambient conditions, which may include potable water or uncontaminated groundwater. "Low threat" discharges to land are not expected to contain substantial concentrations of pollutants that can adversely affect the quality of underlying groundwater.

The Municipal Regional Stormwater NPDES Permit (R8-2013-0024, amending Order No. R8-2010-0033; adopted June 7, 2013) for the SARWQCB Region establishes waste discharge requirements for RCFCWCD, Riverside County, and incorporated cities of the County in the Santa Ana Region (co-permittees include cities of Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Menifee, Moreno Valley, Norco, Perris, Riverside and San Jacinto). The Regulatory Division of RCFCWCD assumes the lead role in Riverside County's NPDES MS4 program compliance. The Municipal Regional Stormwater NPDES Permit covers discharges into the MS4 facilities that they own and/or operate. The SDRWQCB's Riverside County Stormwater Permit (Order No. R9-2010-0016; November 10, 2010), regulates MS4s discharges into water of the United States in the San Diego Region from the City of Murrieta, the City of Temecula, the City of Wildomar, Riverside County, and the RCFCWCD.

California Fish and Game Code Sections 1600-1616

California Fish and Game Code Section 1602 protects the natural flow, bed, channel, and bank of any river, stream, or lake designated by the California Department of Fish and Wildlife (CDFW) in which there is, at any time, any existing fish or wildlife resources, or benefit for the resources. Section 1602 requires notification of any proposed activities that would:

- Divert, obstruct, or change a streambed;
- Use material from the streambed; and/or
- Result in the disposal, or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can flow into a stream.

Activities deemed to potentially substantially adversely affect an existing fish, wildlife, or water resource shall require a Lake and Streambed Alteration Agreement between the entity and the CDFW. See Section 4.4, Biological Resources, for a further discussion of resources subject to the jurisdiction of CDFW.

4.9.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The Riverside County General Plan was reviewed for goals and policies related to hydrology and water quality. The policies contained in the Riverside County General Plan address countywide issues that are general in nature and may apply to numerous locations and land use designations in the Proposed Project area. Several hydrology and water quality policies are contained in the Land Use and Multipurpose Open Space elements of the Riverside County General Plan (Riverside County, 2008).

Murrieta Creek Area Drainage Plan

In 1986, the RCFCWCD completed the Master Drainage Plan for the Murrieta Creek area. The plan identifies and evaluates regional drainage needs, and recommends drainage facilities that would provide flood protection for development (Riverside County, 1986).

City of Menifee General Plan

The City of Menifee General Plan was adopted on December 20, 2013 (City of Menifee, 2013). The Open Space and Conservation and Safety elements of the City of Menifee General Plan contain several hydrology and water quality policies. These policies relate to water conservation, protecting groundwater quality, maintaining high-quality potable water resources, preserving natural floodplains, including Salt Creek, Ethanac Wash, Paloma Wash, and Warm Springs Creek, to facilitate water percolation, replenishment of the natural aquifer, proper drainage, and prevention of flood damage, and reducing flooding and inundation hazards (City of Menifee, 2013).

City of Murrieta General Plan

The City of Murrieta has adopted Murrieta General Plan 2035, which includes several hydrology and water quality policies that relate towards infrastructure improvements, groundwater conservation, and floodplain safety (City of Murrieta, 2011).

Upper Santa Margarita Integrated Regional Water Management Plan

The Upper Santa Margarita IRWMP is a planning and management tool to facilitate efficient use of water resources and develop effective water conservation measures, using regional and watershed-based approaches. The intent of the IRWMP is to enable greater watershed-wide coordination and management of water resources within the Santa Margarita Watershed as a whole, as well as adjoining watershed and regional planning and funding efforts. Development of the IRWMP is a cooperative effort by the RCFCWCD, Riverside County, and Rancho California Water District.

City of Perris General Plan

The City of Perris has adopted the Comprehensive General Plan 2030, which includes hydrology and water quality policies that are geared towards infrastructure improvements for stormwater and water quality detention facilities (City of Perris, 2005).

City of Temecula General Plan

The City of Temecula's General Plan Growth Management/Public Facilities Element (updated in 2005) includes one goal (Goal 6) which addresses processes to ensure adequate water is available for development within the planning area.

In addition, in 2008 the City of Temecula established acceptable actions, consistent with the California Building Code, to control land disturbance, erosion and sedimentation impacts due to construction, grading and encroachment activity on public and private right-of-way. These acceptable actions are outlined in an Engineering and Construction Manual, adopted as part of the City of Temecula's Municipal Code, Title 18 Construction, Grading and Encroachments (City of Temecula, 2014).

4.9.3 Significance Criteria

The significance criteria for assessing the impacts to hydrology and water quality come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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 site 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 site or off site
- Create or contribute to runoff water, which would exceed the capacity of existing or planned stormwater 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 structures within a 100-year flood hazard area, which would impede or redirect flood flows
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including 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

4.9.4 Impact Analysis

Methodology

This analysis of the hydrologic and water quality impacts of the Proposed Project focuses on the effects of both the construction and the long-term Operations and Maintenance (O&M) of the Proposed Project and associated components; removal and reconfiguration of existing pole structures; proposed reconductoring and modifications to the existing Valley 500/115 kV Substation. Temporary and short-term impacts on hydrology and water quality could occur from ground-disturbing activities and other construction-related activities along the approximately 15.4-mile stretch of the Proposed Project over the course of an anticipated 16 months of construction.

The analysis of O&M impacts focuses on how the presence and maintenance of the Proposed Project and other improvements may affect hydrology and water quality. Impacts associated with hydrology and water quality that could result from construction and O&M of the Proposed Project were evaluated based on expected construction practice, the materials to be used, and the locations and duration of Proposed Project-related activities.

Additionally, impacts of the Proposed Project were assessed in light of existing regulatory requirements that would serve to mitigate potential impacts. Information to support the impact analysis was compiled based on published reports and documents, including:

- DWR Bulletin 118 (Temecula Valley and San Jacinto Groundwater Basins)
- DWR Draft Environmental Impact Report for the Perris Dam Remediation Program
- DWR California Water Plan Update 2009
- United States Geological Survey Conceptual Understanding and Groundwater Quality of Selected Basin-Fill Aquifers in the Southwestern United States
- Riverside County General Plan
- City of Temecula General Plan
- City of Perris General Plan
- City of Murrieta General Plan
- SARWQCB Basin Plan for the Santa Ana River Basin (Region 8)
- SDRWQCB Basin Plan for the San Diego Basin (Region 9)
- SWRCB CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs
- San Jacinto River Watershed Council Integrated Regional Watershed Management Plan for the San Jacinto River Watershed

For a discussion of potential impacts on wetlands, waters of the United States, waters of the state, and aquatic resources, see Section 4.4, Biological Resources. For additional discussion of potential impacts from soil erosion during construction and O&M of the Proposed Project, see Section 4.6, Geology and Soils. Furthermore, for additional discussion of potential impacts

associated with accidental spills and storage of hazardous materials, see Section 4.8, Hazards and Hazardous Materials.

4.9.4.1 Would the project violate any water quality standards or waste discharge requirements?

Construction

Less Than Significant Impact. Although the Proposed Project area is primarily flat and much of the route has been previously disturbed, construction of the Proposed Project could result in a temporary degradation of water quality. Sediment would be the constituent of greatest concern during construction, resulting from potential erosion during excavation/drilling (e.g., during pole removal and pole/foundation installation); trenching and grading (e.g., for duct bank installation, establishment of potential material staging yards, laydown/work areas, access road and access locations, existing structure removal, new structure pad locations); and during the transport of soil for disposal. The Proposed Project is expected to temporarily disturb approximately 179.3 acres and permanently disturb approximately 14.2 acres.

In addition to what is already known about the Proposed Project area, further geotechnical site assessment and field investigation would be conducted before the start of construction where necessary. A geotechnical investigation would include characterization of the soil or bedrock units underlying the Proposed Project, and would determine groundwater levels if groundwater was encountered during the investigation. Should groundwater be encountered during trenching, excavation, or drilling, it would be disposed or reused, in accordance with all applicable laws. If construction dewatering techniques required the discharge of uncontaminated groundwater to the jurisdiction of the SDRWQCB, a request for a conditional waiver for discharge of uncontaminated groundwater would be made to the SDRWQCB. If the discharge would occur within the jurisdiction of the SARWQCB, a WDR would be submitted to obtain a ruling from the SARWQCB.

SCE would be required to obtain coverage under the CGP. The CGP requires the development and implementation of SWPPP(s). Because the Proposed Project would be associated with a linear project, the LUP provisions would apply. The SWPPP(s) would detail treatment measures and site-specific BMPs that would be implemented to minimize discharges of pollutants in stormwater runoff to the maximum extent practicable. The SWPPP(s) prepared for the Proposed Project would be based on final engineering design and identify locations for storage of hazardous materials during construction as well as BMPs, notifications, and cleanup requirements for incidental spills or other potential releases of hazardous materials. In addition, the SWPPP(s) would have inspection, monitoring, and reporting requirements that would be implemented and maintained during construction.

The CGP also includes special provisions for LUPs such as the Proposed Project. All LUPs also must comply with a minimum set of Good Housekeeping measures, the Non-Stormwater Management measures, general Sediment Control measures, and the Inspection, Maintenance, and Repair requirements specified in Attachment A of the CGP.

Approximately 179.3 acres would be restored to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Proposed Project. A total of 14.2 acres, however, would be permanently disturbed, including areas of permanent new poles and access roads. Revegetation and/or restoration of these disturbed areas would minimize risks of erosion and sediment delivery to receiving waters. In addition to restoration, any necessary drainage improvements for the Proposed Project also would minimize erosion and adverse effects on stormwater runoff. Detailed information regarding locations requiring drainage improvements would be provided when more detailed engineering information became available.

Other pollutants that could affect surface and groundwater quality during Proposed Project construction include petroleum products (e.g., gasoline, diesel, kerosene, and grease) from operating heavy machinery and equipment. The SWPPP(s) would detail non-stormwater management and material management BMPs to address these potential pollutants. Implementation of non-stormwater management and material management BMPs would minimize impacts on water quality from storing materials or equipment. All hazardous materials would be stored, handled, and used in accordance with applicable regulations. Implementation of the SWPPP(s) and associated BMPs would minimize impacts on water quality from erosion, accidental spills, and other potential water quality impacts during construction. A further discussion of impacts associated with accidental spills and storage of hazardous materials during construction is presented in Section 4.8, Hazards and Hazardous Materials.

Any sanitary waste produced during construction (e.g., from portable toilets) would be disposed of according to applicable laws, rules, and regulations. In addition, implementation of the Worker Environmental Awareness Plan (WEAP), as described in Section 3.9.2, Worker Environmental Awareness Training, would provide construction personnel with instruction on their individual regulatory compliance responsibilities. With respect to water quality, the WEAP training would include worker responsibilities under the CWA, the SWPPP(s), site-specific BMPs, and about the location of Material Safety Data Sheets. The training also would provide instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak. Instruction also would be provided on the importance of maintaining the construction site in regards to trash disposal.

SCE would be required to obtain a Section 401 certification and a permit under Section 404, for discharge of dredged or fill material into "waters of the United States" from the RWQCB and USACE, respectively, and a Section 1602 Lake and Streambed Alteration Agreement from the CDFW, if needed. See Section 4.4, Biological Resources, for a further discussion of waters of the United States. These certifications and/or permits would include project conditions that are protective of water quality.

With implementation of the SWPPP(s), the WEAP, and any conditions from Sections 401/404/1602 permits, impacts to water quality during construction would be less than significant.

Operation

Less Than Significant Impact. The CGP states that LUP projects are not subject to post-construction requirements because of the nature of their construction to return project sites to preconstruction conditions. As described in Chapter 3, Project Description, routine access road maintenance would be conducted on an annual and/or as-needed basis, including cleaning ditches, moving or establishing berms, clearing and making functional drain inlets and culverts, culvert repair, clearing and establishing water bars, and cleaning and repairing over-side drains. Access road maintenance also would include the repair, replacement, and installation of stormwater diversion devices on an as-needed basis. These activities would help to minimize erosion and the potential for sedimentation of waterways.

Ongoing O&M of the Proposed Project and associated components would not result in the discharge of non-stormwater discharges. Most regular O&M activities of overhead facilities are performed from existing access roads, and therefore they would not result in additional surface disturbance. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165, which is a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. O&M would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. A discussion of impacts associated with transport and storage of hazardous materials during O&M of the Proposed Project is presented in Section 4.8, Hazards and Hazardous Materials. As a result, O&M of the Proposed Project would not violate any water quality standards or waste discharge requirements. The impact would be less than significant.

4.9.4.2 Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

Construction

Less Than Significant Impact. During construction of the Proposed Project, the anticipated removal of groundwater would be largely limited to dewatering excavations for the placement of TSPs and LWS poles. If this would be necessary, the effect would be localized and short in duration. There may also be some use of groundwater by water trucks for dust-control measures. However, this use would also be limited in size and scope, and the water supplies would come from approved sources. Construction related activities for the Proposed Project would not be expected to deplete or alter the existing groundwater supplies. The depths of wood and LWS poles would not reach groundwater depths estimated at 19 to 61 feet because the poles would only reach a depth of approximately 10 to 12 feet. Foundations in soft or loose soil or those that extend below the groundwater level may be stabilized with drilling mud slurry. In this instance, mud slurry would be placed in the hole during the drilling process to prevent the sidewalls from sloughing. Concrete would then be pumped to the bottom of the hole, displacing the mud slurry. Depending on site conditions, the mud slurry brought to the surface would typically be collected in a pit adjacent to the foundation or vacuumed directly into a truck to be reused or discarded at an appropriate off-site disposal facility in accordance with all applicable laws.

During construction, water from locally available water agency sources would be used for dust control and grading activities. Throughout the 16 month duration of the Proposed Project, approximately 75 to 110 acre-feet of water would be used for dust control, as well as hydro-seeding and soil compaction within the Proposed Project area.

Therefore, construction of the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge to the extent that a net deficit in aquifer volume or a lowering of the local groundwater table would occur. The impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project is not expected to cause any net increase in water demands that would be supplied by groundwater. The Proposed Project would result in an increase in the total impermeable surfaces within the Proposed Project area; however, this increase would represent a very small portion of the right-of-way and would not substantially interfere with groundwater recharge. New impervious surface would include duct banks, poles, and TSP foundations. Existing dirt access roads could be re-graded, however would remain as permeable surfaces. Operation of new telecommunication equipment would occur within the existing Valley and Triton Substations and would not create any associated groundwater demands or result in an increase in impervious surface. The increase in net impervious surface would, therefore, not substantially interfere with groundwater recharge to the extent that a net deficit in aquifer volume or a lowering of the local ground water table would occur. The impact would be less than significant.

4.9.4.3 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

Less Than Significant Impact. Construction of the Proposed Project would involve grading and the installation of surface improvements that could alter the natural flow of stormwater runoff at the Proposed Project area. Construction of the Proposed Project would span Salt Creek, Warm Springs Creek, Tucalota Creek, Santa Gertrudis Creek and three unnamed ephemeral drainages/streams. No new roads or access roads would cross through known streams. In addition, SCE would not locate pole structures, stringing (pull, tension, or splicing) sites within drainages. For example, no poles would be placed within Salt Creek (near Olive Avenue), with a gap between poles of approximately 550 feet (0.1 mile) to accommodate this waterway. Warm Springs Creek also would be avoided in terms of pole placement. No new access roads would be required for Segment 2 of the Proposed Project. Preliminary engineering identifies that a pole may be placed just north of SR-79 and Max Gillis Boulevard/Thompson Road; adjacent to the existing roadway where the groundcover is already disturbed and the roadway is elevated on a berm that runs almost perpendicular to an unnamed ephemeral drainage. Therefore, preliminary engineering indicates the pole would not be placed within this unnamed ephemeral drainage.

In addition, SCE would clean up and restore all areas that would be temporarily disturbed by construction of the Proposed Project (which may include potential material staging yards, construction setup areas, stringing sites, guard structure locations [including one guard structure location at the edge of a vegetated stormwater basin on Leon Road at Jean Nicolas Road], and splicing sites) to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Proposed Project. Therefore, construction of the Proposed Project would not directly alter the course of a stream or river or substantially alter the existing drainage pattern of the site in a manner that would result in substantial erosion or siltation on or off site. The impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above, the Proposed Project would span Salt Creek, Warm Springs Creek, Tucalota Creek, Santa Gertrudis Creek, and three unnamed ephemeral drainages/streams. No access roads would cross through known streams. In addition, SCE would not place pole structures, pulling, tensioning and splicing set-up locations within drainages. Following construction, temporarily disturbed areas would be restored to minimize future soil erosion.

O&M activities primarily would take place from existing access roads. Routine access road maintenance would be conducted on an annual and/or as-needed basis, including cleaning ditches, moving or establishing berms, clearing and making functional drain inlets and culverts, culvert repair, clearing and establishing water bars, and cleaning and repairing over-side drains. Access road maintenance also would include the repair, replacement, or installation of stormwater diversion devices on an as needed basis. The foregoing stormwater diversion devices would minimize erosion or the potential for sedimentation of waterways. Therefore, O&M of the Proposed Project would not alter the existing drainage patterns of the Proposed Project area in a manner that would result in substantial erosion or siltation on- or off-site. The impact would be less than significant.

4.9.4.4 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?

Construction

Less Than Significant Impact. The Proposed Project would result in a net increase in the total impermeable surfaces at the Proposed Project area. Approximately 14.2 acres would be permanently disturbed during the installation of anchors, the use and maintenance of a permanent unpaved access road, access to pole site locations, and installation of subtransmission structures. Not all of the 14.2 acres would be covered with impervious surface (e.g., pole structures, concrete foundations). Some of this permanently disturbed acreage would be located adjacent to poles, but it would not necessarily be impervious. Although access roads would not be paved, their dirt surface could be compacted, resulting in a reduced water infiltration potential. Any land that may be disturbed at a potential material staging yard would be returned to pre-construction

conditions or left in its modified condition, if requested by the landowner following the completion of construction for the Proposed Project. The increase in impervious surfaces associated with the Proposed Project would be offset somewhat by the removal of existing structures. Construction activities at the existing substations and Segment 2 of the Proposed Project would be within existing disturbed areas and would not contribute any additional impervious surface or alter the drainage pattern of the site. Overall, the net increase in impervious surface associated with the Proposed Project would represent a small proportion of the total area.

As discussed above, SCE would be required to obtain coverage under the CGP. With implementation of the SWPPP(s) and associated BMPs as required by the CGP, the potential for the Proposed Project to affect stormwater runoff would not be substantial.

As discussed above, SCE would be required to obtain a Section 401 certification, a Section 404 permit, and a Section 1602 Agreement for discharge of dredged or fill material into "waters of the United States," and waters of the state, as applicable. Adherence to the project conditions included in the certification and permit(s) would reduce the potential for the Proposed Project to affect stormwater quality.

Additional BMPs that would reduce the potential for sediment transport, for example silt fences, fiber rolls, and gravel bags, may be included in the SWPPP(s) and would be placed at active construction sites before storm events. These BMPs would mitigate sediment from being transported out of the Proposed Project area and entering off-site storm drains or waterways. These BMPs also would serve to reduce the rate of stormwater runoff, thereby decreasing the potential for flooding on- or off-site. The SWPPP(s) would be based on final engineering design and would include all Proposed Project components. Incorporation of these previously mentioned BMPs would help to minimize potential effects on on-site and off-site flooding from construction of the Proposed Project would not be substantial.

Construction of the Proposed Project would not occur within Salt Creek, Warm Springs Creek, Tucalota Creek, Santa Gertrudis Creek, or the three unnamed ephemeral drainages/streams, but rather would span over these creeks. No access roads would cross known streams. In addition, SCE would not construct pole structures or place pulling, tensioning, and splicing set-up locations within drainages. Subtransmission structure sites as well as access roads typically are graded to follow the natural ground surface contour. Therefore, construction of the Proposed Project would not substantially alter the existing drainage pattern of the site or area, nor would it alter the course of a stream or river. In addition, construction of the Proposed Project would not 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. The impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above, engineered ground surface improvements designed to minimize the effects of uncontrolled water flow would be installed during construction of the Proposed Project. These ground surface improvements would be maintained during O&M of the Proposed Project, and would minimize the change in the rate or amount of surface water runoff in the area. Therefore, O&M of the Proposed Project would not

substantially alter the existing drainage pattern of the site or area, nor would it alter the course of a stream or river. In addition, O&M of the Proposed Project would not 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. The impact would be less than significant.

4.9.4.5 Would the project create or contribute to runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

Less Than Significant Impact. Existing drainage along Segment 1 of the Proposed Project is primarily in the form of surface drainage ditches that run adjacent to the roadways or sheet flows where no drainage conveyance exists to drainages that connect to creeks. However, on Leon Road, south of Jean Nicolas Road and adjacent to a residential development, drainage facilities consist of vegetated stormwater basins. For most of Segment 2 of the Proposed Project, however, no drainage conveyance exists. Because of the small footprint and distributed nature of the construction areas for the Proposed Project, including access road and access locations, the capacity of any existing or planned stormwater drainage systems would not be affected by construction of these facilities. The guard structure planned for short-term installation at the edge of the vegetated stormwater basin on Leon Road at Jean Nicolas Road would be temporary in nature and therefore would not affect the capacity of this stormwater system. Any accidental spill during construction would be immediately addressed as outlined in the BMPs. A further discussion of impacts associated with accidental spills and storage of hazardous materials during construction is presented in Section 4.8, Hazards and Hazardous Materials. Any sanitary waste produced during construction (e.g., from portable toilets) would be disposed of in accordance with applicable sanitation waste management practices. In addition, implementation of the WEAP would provide construction personnel with instructions on their individual responsibilities under the CWA, the SWPPP(s), and site-specific BMPs.

Construction of the Proposed Project would not create or contribute to surface water runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide a substantial additional source of polluted runoff. The impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above, the small footprint and distributed nature of the Proposed Project would not substantially contribute to runoff water or provide substantial additional sources of polluted runoff. Access roads would be maintained on an annual and/or as-needed basis, to maintain road integrity, minimize erosion, and properly direct stormwater. O&M of the Proposed Project would not substantially increase the rate or amount of surface water runoff in a manner that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The impact would be less than significant.

4.9.4.6 Would the project otherwise substantially degrade water quality?

Construction

Less Than Significant Impact. As discussed above regarding the construction of Proposed Project components related to flooding, erosion, potential dewatering, and discharge of pollutants, no activities associated with the construction of the Proposed Project would have the potential to substantially degrade water quality. All required permits for construction related activities would be secured before the start of construction. Use of hazardous materials at the site is discussed in Section 4.8, Hazards and Hazardous Materials. The impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above regarding the O&M of the Proposed Project relating to flooding, erosion, and discharge of pollutants, no activities associated with the O&M of the Proposed Project would have the potential to substantially degrade water quality. The impact would be less than significant.

4.9.4.7 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?

Construction

No Impact. Construction of the Proposed Project would not involve housing. No impact would occur.

Operation

No Impact. O&M activities for the Proposed Project would not involve housing. No impact would occur.

4.9.4.8 Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Construction

Less Than Significant Impact. The existing Valley 500/115 kV Substation and the northern-most portion of Segment 1 of the Proposed Project along a private road and Briggs Road are mapped as being within the 100-year flood zone associated with the San Jacinto River. A small section of Segment 1 of the Proposed Project along Leon Road, between Simpson Road and Domenigoni Parkway, is mapped as being within the 100-year flood zone associated with Salt Creek. Finally, a small area of Segment 2 of the Proposed Project, adjacent to the Terminal TSP at Nicolas Road, is mapped as being within the 100-year flood zone associated with potential flooding along Santa Gertrudis Creek (see Figure 4.9-1 Hydrology and Floodplain Boundaries).

Construction of the Proposed Project would span Salt Creek, Warm Springs Creek, Tucalota Creek, Santa Gertrudis Creek, and three unnamed ephemeral drainages/streams, and no new roads, access roads, or access locations would cross through known streams. SCE would not place pole structures, pulling, tensioning, and splicing set-up locations within drainages. In addition, any poles and foundations located within a 100-year floodplain would not alter drainage patterns, as they would not occupy a large cross-section relative to the entire cross-section of the 100-year floodplain that would substantially impede flood flows. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above, portions of the Proposed Project would be within a 100-year floodplain (see Figure 4.9-1 Hydrology and Floodplain Boundaries). However, preliminary engineering indicates no pole structures would be placed within drainages or creeks. In addition, any poles and foundations located within a 100-year floodplain would not alter drainage patterns, as they would not occupy a large enough cross section relative to the entire cross section of the 100-year floodplain and would not substantially impede flood flows.

O&M would not result in the addition of new structures into the 100-year flood plain. The subtransmission and distribution lines would be maintained in a manner consistent with CPUC G.O. 95 and G.O. 128 as applicable. Normal operation of the lines would be controlled remotely through SCE control systems, and manually in the field as required. As described above, SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Most regular O&M activities of overhead facilities are performed from existing access roads with no surface disturbance. Repairs done to existing facilities, such as repairing or replacing existing poles, could occur in undisturbed areas; however, O&M activities would not likely impede or redirect flood flows within a 100-year flood hazard area. Therefore, the impact would be less than significant.

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

Construction

Less Than Significant Impact. The Proposed Project is located outside of the area protected from a 100-year flood by levees along the San Jacinto River. Therefore, failure of a levee would not expose the Proposed Project to flooding.

However, construction of portions of Segment 1 and Segment 2 of the Proposed Project would occur within dam inundation areas for Lake Skinner and Diamond Valley Lake. The Riverside County General Plan describes portions of Segment 1 of the Proposed Project as being a high dam hazard zone (Riverside County, 2008). The City of Temecula also maps a portion of the Proposed Project along Leon Road (from Thompson Road to Auld Road) and a small section along Segment 2 of the Proposed Project along Leon Road near the intersection of Allen Road as located within the dam inundation area of Lake Skinner. Therefore, the Proposed Project could

be subject to flooding in the case of a dam failure at either Lake Skinner or Diamond Valley Lake, as water from the lakes would travel west toward the Proposed Project. Water from Lake Skinner would travel west toward the Proposed Project generally along Tuculota Creek and other unnamed drainages. Water from Diamond Valley Lake would travel west toward the Proposed Project generally along Warm Springs Creek and other unnamed drainages and lowlands.

Lake Skinner and Diamond Valley Lake dams are located approximately 3 miles to the east of the Proposed Project at their closest points. Construction of Diamond Valley Lake was completed in 2003 and Lake Skinner was originally constructed in 1973, with an expansion completed in 1991. Dam failure would be an extremely remote possibility, as these dams were recently designed and constructed and are expected to survive earthquakes without affecting their structures. Although portions of the Proposed Project could be subject to flooding from dam failure, the risk during construction is not significant since the Proposed Project is located approximately 3 miles from these dams and the dams were recently constructed or expanded.

The Proposed Project is located primarily along an existing subtransmission line corridor and therefore would not expose new types of structures to flood risk as a result of dam failure. To the maximum practical extent possible, the poles and foundations are proposed to be located outside of known streams, and would be designed to survive effects of floods as well as designed not to alter drainage patterns.

The existing Valley 500/115 kV Substation, the northern-most portion of Segment 1 of the Proposed Project, a small section of Segment 1 of the Proposed Project along Salt Creek, and a small area of Segment 2 of the Proposed Project adjacent to the Terminal TSP are mapped as being within the 100-year floodplain (see Figure 4.9-1 Hydrology and Floodplain Boundaries). The Proposed Project would be designed to withstand the effects of such a flood event. This design may also serve to withstand potential flooding as a result of dam failure. For TSPs that would be located in a dam inundation area, the cross section of the foundation would not be a considerable portion of the entire width of the flood area. Thus, TSP structures would not substantially alter the drainage pattern or characteristics for the dam inundation area that would expose people or structures to a substantial risk of loss, injury, or death involving flooding from dam failure.

Thus, construction 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 the failure of a levee or dam. The impact would be less than significant.

Operation

Less Than Significant Impact. As discussed above, portions of the Proposed Project are located within or crossing the dam inundation areas of Lake Skinner and Diamond Valley Lake. Normal O&M of the Proposed Project would be controlled remotely through SCE control systems, and thus, no additional full-time, on-site staff would be necessary for O&M of the Proposed Project. On-site inspections and maintenance, however, would require the temporary presence of personnel on site; however, they would be present only on a short-term, periodic basis and would not be expected to be exposed to a substantial risk of loss, injury, or death involving flooding from dam or levee failure. The impact would be less than significant.

4.9.4.10 Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?

Construction

Less Than Significant Impact. A seiche is defined as a standing wave oscillation in an enclosed or semi-enclosed, shallow to moderately shallow water body or basin (e.g., lakes, reservoirs). Although seiches can result from a number of factors, in southern California, the greatest threat of seiches comes from earthquakes. In Riverside County, earthquake-triggered geologic effects are acknowledged to include seiches (Riverside County, 2008). Amplitudes of seiche waves associated with earthquake ground motion typically have been less than 0.5 meters high; however, some have exceeded 2 meters (Riverside County, 2000).

Construction of the Proposed Project would occur on the inland side of a topographical divide from the Pacific Ocean, and would not be affected by tsunami. Effects from mudslides are discussed in Section 4.6, Geology and Soils.

As a number of lakes are within several miles of the Proposed Project area, seiches as a result of ground shaking have the potential to occur. A summary of the lakes in the Proposed Project vicinity is provided in Table 4.9-2 Location of Waterbodies in Relation to the Proposed Project. Any water generated by a seiche would be expected to flow within natural water courses, similar to a dam inundation event. The Proposed Project would be constructed to the safety standards required and would not result in a substantial risk of loss, injury, or death involving inundation by seiche. Construction crews would be on-site on a temporary, short-term basis and would not be expected to be exposed to substantial risk or injury or death involving inundation by seiche. The impact would be less than significant.

Table 4.9-2 Location of Waterbodies in Relation to the Proposed Project

Waterbody	Distance from the Proposed Project (miles)	Drainage Description
Lake Skinner	2.6 miles east	Discharges to Tuculota Creek, which flows to Santa Gertrudis Creek, then Murrieta Creek, then to the Santa Margarita River and ultimately to the Pacific Ocean
Diamond Valley Lake	2.9 miles east	Discharges to Warm Springs Creek, which flows to Murrieta Creek, then to the Santa Margarita River and ultimately to the Pacific Ocean
Lake Perris	7 miles north	Discharges to San Jacinto River, which flows to Canyon Lake and ultimately into Lake Elsinore
Canyon Lake	8.4 miles west	Discharges to Lake Elsinore
Lake Elsinore	12 miles west	Discharges into an outflow channel, which flows to Temescal Creek, then into Prado Flood Control Basin, to the Santa Ana River and ultimately to the Pacific Ocean.
Source: Google Earth, Pro, 2012 and 2014		

Operation

Less Than Significant Impact. The Proposed Project would be located on the inland side of a topographical divide from the Pacific Ocean, and would not be affected by tsunami. Effects from mudslides are discussed in Section 4.6, Geology and Soils.

As discussed above, the Proposed Project would be located in an area that would have potential for exposure to seiches. Normal O&M of the Proposed Project would be controlled remotely through SCE control systems, and thus, no additional full-time, on-site staff would be necessary for O&M of the Proposed Project. On-site inspections and maintenance, however, would require the temporary presence of personnel on-site; however, they would be present only on a short-term, periodic basis and would not be expected to be exposed to substantial risks, injury, or death involving inundation by seiche. The impact would be less than significant.

4.9.5 Applicant Proposed Measures

With implementation of BMPs and adherence to the CGP and SWPPP(s), impacts would be less than significant and no additional measures are proposed.

4.9.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

The portions of the Alternative Project located south of the intersection of Scott Road and Leon Road are located in the San Diego Basin Watershed and Temecula Valley Groundwater Basin. The Alternative Project spans several unnamed ephemeral drainages/streams. Canyon Lake and Lake Elsinore are located approximately 7 and 10 miles west of the Alternative Project, respectively. Lake Perris is located approximately 10 miles north of the Alternative Project. Segment 2 of the Alternative Project is partially located within the dam inundation area for Lake Skinner (City of Temecula, 2005). As shown in Figure 4.9-1 Hydrology and Floodplain Boundaries, the portion of the Alternative Project located south of the intersection of Scott Road and Leon Road is not within the 100-year flood zone with the exception of Segment 2 of the Alternative Project adjacent to the Terminal TSP.

The Alternative Project would have the potential to create greater overall impacts because it would be approximately 4 miles longer, and therefore would require additional poles (i.e., disturb additional area), and may require a longer construction time frame. BMPs, as required by the SWPPP(s), would be implemented accordingly to cover the entire length of the Alternative Project. Overall, construction and O&M of the Alternative Project would have similar, although slightly higher potential for impacts on hydrology and water quality, compared to the Proposed Project. The impacts would be less than significant.

4.9.7 References

ALL-HAZARD AUTHORITIES of the Federal Emergency Management Agency (FEMA). 1997 (August). The National Flood Insurance Act of 1968, as amended, and The Flood Disaster Protection Act of 1973, as amended, 42 U.S.C. 4001 *et. seq*. Available: http://www.fema.gov/library/viewRecord.do?id=2216. Accessed February 2013.

California Biodiversity Council. 2008. Watershed Map of California. Available: http://biodiversity.ca.gov/. Accessed April 29, 2014.

California Department of Water Resources (DWR). 2004 (February 27). California's Groundwater Bulletin 118 Update. Temecula Valley Groundwater Basin. Available: http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/9-5.pdf. Accessed January 2013.

———. 2006 (January 20). California's Groundwater Bulletin 118 Update. San Jacinto Groundwater Basin. Available: http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/8-5.pdf. Accessed August 2012.

———. 2010a. California Water Plan Update 2009, South Coast Integrated Water Management. Available: http://www.waterplan.water.ca.gov/cwpu2009/index.cfm. Accessed August 2012.

———. 2010b. Draft Environmental Impact Report for the Perris Dam Remediation Program. Available: http://www.water.ca.gov/lakeperris/docs/DEIR-CD_206008.02_Perris.pdf. Accessed August 2012.

———. 2014. Lake Perris Dam Project Web site. Available: http://www.water.ca.gov/lakeperris/. Accessed May 2014.

California Public Utilities Commission (CPUC). 1995. General Order Index. Available: http://docs.cpuc.ca.gov/PUBLISHED/Graphics/589.PDF. Accessed February 2013.

City of Menifee. 2013. *City of Menifee General Plan*. Available: http://www.cityofmenifee.us/index.aspx?NID=221. Accessed April 2014.

City of Murrieta. 2011 (July). *Murrieta General Plan 2035*.

City of Perris. 2005. *Comprehensive General Plan 2030*. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed February 2013.

City of Temecula. 2005. *City of Temecula General Plan*. Public Safety Element. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed December 10, 2012.

———. 2014. City of Temecula Municipal Code. Available: http://www.qcode.us/codes/temecula/. Accessed May 2014.

Eastern Municipal Water District (EMWD), 2012a (December). *Draft Environmental Impact Report, Recycled Water Ponds Expansion and Optimization Project*. Available: http://www.emwd.org/ftp/documents/Recycled%20Water%20Ponds%20Exp_Opt%20Draft%20EIR%20Dec_2012.pdf. Accessed February 2013.

———. 2012b (June). *West San Jacinto Groundwater Basin Groundwater Management Plan, 2011 Annual Report*. Available: http://www.emwd.org/modules/showdocument.aspx?documentid=1562. Accessed May 2014.

IDcide. 2012. Winchester, California Weather. Available: http://www.idcide.com/weather/ca/winchester.htm. Accessed August 2012.

Riverside County. 1986 (March). Murrieta Creek Area Drainage Plan. Available: http://www.floodcontrol.co.riverside.ca.us/Downloads/Area%20Drainage%20Plans/Updated/Reports/Murrieta%20Creek%20ADP.pdf. Accessed April 2014.

———.2000 (August). *Natural Hazard Mapping, Analysis, and Mitigation: a Technical Background Report in Support of the Safety Element of the New Riverside County 2000 General Plan*. Prepared by Earth Consultants International. Available: http://www.rctlma.org/genplan/general_plan_2008/technical_appendices/App_H_Technical%20Report_optimized.pdf. Accessed December 2012.

———. 2003 (October). *Riverside County General Plan, Harvest Valley/Winchester Area Plan*. Available: http://www.rctlma.org/genplan/general_plan_2008/area_plan_vol_1/Harvest_Valley_Winchester_Area_Plan_2008.pdf. Accessed August 2012.

———. 2005 (March). *Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan*. Available: http://www.rvcfire.org/opencms/functions/oes/EmergencyManagement/PlansandPublications/FINAL_FEMA_Approved_LHMP_Part_1_3-05.pdf. Accessed August 2012.

———. 2008. *Riverside County General Plan*. Available: http://www.rctlma.org/genplan/content/gp.aspx. Accessed August 2012.

San Jacinto River Watershed Council (SJRWC). 2007 (December 31). *Integrated Regional Watershed Management Plan for the San Jacinto River Watershed*. Prepared by Tetra Tech and WRIME. Available: http://www.cityofcanyonlake.com/uploads/files/SanJacintoIRWMP_EntireDocument.pdf. Accessed August 2012.

Santa Ana Regional Water Quality Control Board (SARWQCB). 2014. Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin (Region 8). January 24, 1995, updated in

July 2014. Available: http://www.waterboards.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml. Accessed July 2014.

San Diego Regional Water Quality Control Board (SDRWQCB). 2007. *Water Quality Control Plan for the San Diego Basin (Region 9)*. September 8, 1994, with amendments effective prior to April 25, 2007. Available: http://www.waterboards.ca.gov/rwqcb9/water_issues/programs/basin_plan/index.shtml. Accessed August 2012.

———. 2011. Water Quality Control Plan (Basin Plan) for the San Diego Region (Region 9). April 2011. Available: http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml. Accessed May, 2014.

State Water Resources Control Board (SWRCB). 2010a (January 29). State of California Regional Water Quality Control Board Santa Ana Region, Order No. R8-2010-0033, NPDES No. CAS 6180330. Available: http://www.waterboards.ca.gov/rwqcb8/board_decisions/adopted_orders/orders/2010/10_033_RC_MS4_Permit_01_29_10.pdf. Accessed February 2013.

———. 2010b (November 12). 2010 Integrated Report, Clean Water Act Section 303(d) List / 305(b) Report. Approved by USEPA on November 12, 2010. Available: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml. Accessed January 2013.

———. 2010c (November 16). 2009-0009-DWQ as amended by 2010-0014-DWQ. September 2, 2009, as modified on November 16, 2010. Available: http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_complete.pdf. Accessed December 2012.

———. 2013a (January 1). Porter-Cologne Water Quality Control Act (Cal. Water Code, Division 7). Additions and Amendments Effective January 1, 2013 Available: http://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf. Accessed February 2013.

.2013b (June 7). State of California Regional Water Quality Control Board Santa Ana Region, Order No. R9-2013-0024, NPDES No. CAS 618033. Available: http://www.waterboards.ca.gov/rwqcb8/board_decisions/adopted_orders/orders/2013 Accessed July 2014

United States. Environmental Protection Agency (USEPA). 2012. USEPA Water Quality Standards History Website. Last updated April 3, 2012. Available: http://water.epa.gov/scitech/swguidance/standards/history.cfm. Accessed February 20, 2013.

United States Geological Survey (USGS). 2010. Conceptual Understanding and Groundwater Quality of Selected Basin-Fill Aquifers in the Southwestern United States. Section 12—Conceptual Understanding and Groundwater Quality of the Basin-Fill Aquifers in the

Santa Ana Basin, California. Prepared by Susan A. Thiros. Available: http://pubs.usgs.gov/pp/1781/pdf/pp1781.pdf. Accessed December 10, 2013.

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Section 4.10
Land Use and Planning

4.10 Land Use and Planning

This section describes land use and planning in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.10.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.10.1.1 Existing Land Uses within the Proposed Project and Vicinity

Existing land uses within the vicinity of the Proposed Project are summarized below (see Figure 4.10-1 General Plan Land Use and Figure 4.10-2 Zoning for related zoning and land use designations along Proposed Project). The following documents were reviewed for this discussion: City of Menifee Existing Land Use Inventory Map (City of Menifee and The Planning Center, 2010), City of Menifee Community View (City of Menifee, 2014), Riverside County Land Information System (Riverside County, 2012 and 2014), City of Perris Community View (City of Perris and Digital Map Products, 2011), Murrieta General Plan 2035 (City of Murrieta, 2011), City of Temecula Geographic Information System Map Viewer (2014b), Google Maps (2013 and 2014), and Google Earth, Pro (2012 and 2014).

4.10.1.1.1 Valley 500/115 kV Substation

The existing Valley 500/115 kV Substation is located on Menifee Road immediately south of State Route (SR) 74, in the City of Menifee. The existing land uses at SCE's existing Valley 500/115 kV Substation are electrical power facilities.

4.10.1.1.2 Segment 1 of the Proposed Project

Segment 1 of the Proposed Project would originate in the City of Menifee, specifically on the south side of the existing Valley 500/115 kV Substation. It would extend easterly on a private road (SCE access road/farm road) for approximately 1 mile, until it reaches Briggs Road. The existing land uses along this portion of Segment 1 of the Proposed Project include electrical infrastructure and facility (e.g., power lines and poles, and Valley 500/115 kV Substation), vacant land, and agriculture. Heritage High School is located approximately 0.08 of a mile north of Segment 1 of the Proposed Project and an existing 115 kV line, at the intersection of a private road and Briggs Road.

From the intersection of a private road and Briggs Road, Segment 1 of the Proposed Project would extend south on Briggs Road for approximately 1 mile until it reaches Matthews Road. At this location, Briggs Road marks one of the boundaries between the City of Menifee and unincorporated Riverside County. Segment 1 of the Proposed Project would be located primarily in unincorporated Riverside County. However, a portion of the construction area would be located on the west side of Briggs Road in the City of Menifee. The existing land uses along this portion of Segment 1 of the Proposed Project include electrical infrastructure (e.g., power lines and poles), agriculture, and drainage basin. Private residential uses are located to the east (specifically on the east side of Briggs Road).

From the intersection of Briggs Road and Matthews Road, Segment 1 of the Proposed Project would travel southeasterly and adjacent to Matthews Road for approximately 1 mile until it would intersect with Grand Avenue. Segment 1 of the Proposed Project would then extend east along Grand Avenue for approximately 0.2 of a mile until it would intersect with Leon Road. This portion of Segment 1 of the Proposed Project would still be located within unincorporated Riverside County. In addition, this portion would also be located within Burlington Northern Santa Fe Railroad (BNSF) right-of-way (ROW) where it crosses the railroad at Grand Avenue. The existing land uses along this portion of Segment 1 of the Proposed Project include electrical infrastructure, vacant land, and agriculture. Double Butte Mountain (including the Double Butte County Park, which is a former site of a county landfill) is located to the east of this portion of Segment 1 of the Proposed Project. Double Butte Mountain is a steep, dual-peaked mountain, centrally located between the communities of Winchester and Homeland (Riverside County, 2006).

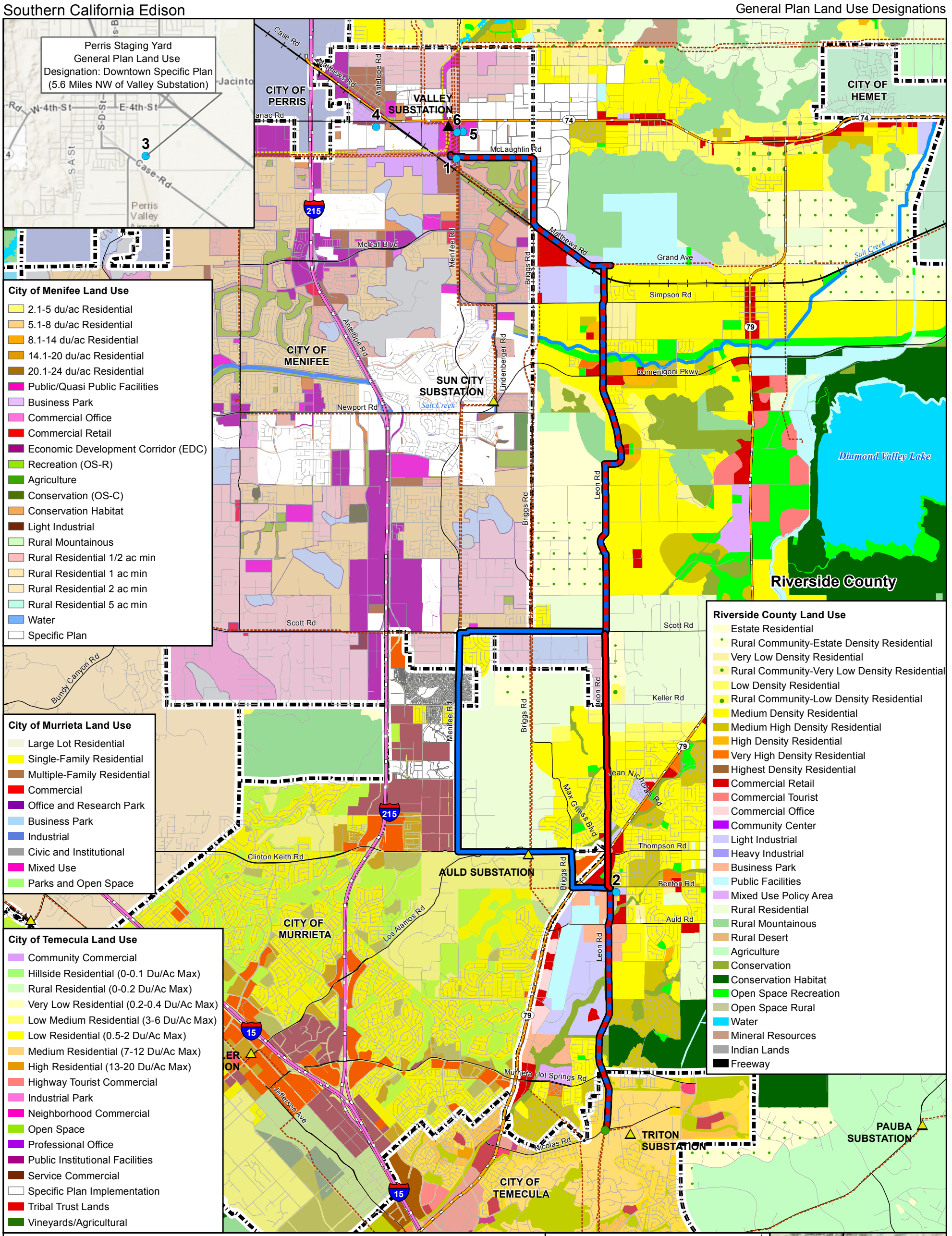
From the intersection of Grand Avenue and Leon Road, Segment 1 of the Proposed Project would extend south on Leon Road for approximately 5 miles, until it intersects with Scott Road. This portion of Segment 1 of the Proposed Project would be located within unincorporated Riverside County. In addition, this portion would also be located within BNSF's ROW where it crosses the railroad approximately 0.14 of a mile south of the intersection of Grand Avenue and Leon Road.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.10-1

Southern California Edison

General Plan Land Use Designations

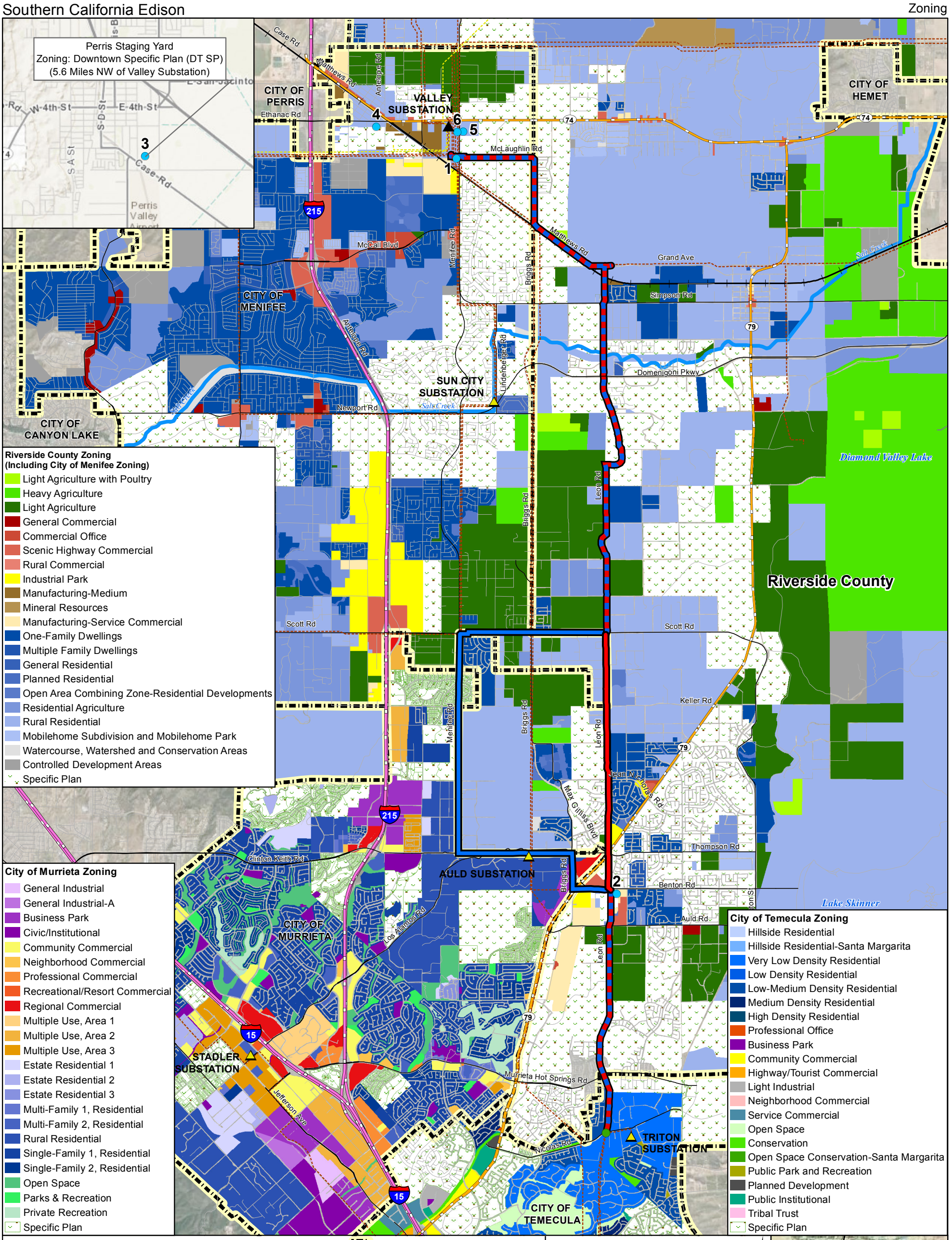


VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.10-2

Southern California Edison

Zoning



The existing land uses along this 5-mile portion of Segment 1 of the Proposed Project include vacant land, open space, public utilities (cell tower), agriculture, unchannelized creek (Salt Creek), and electrical infrastructure. Along this portion of Segment 1 of the Proposed Project, pockets of residential uses are located to the east and west.

From the intersection of Scott Road and Leon Road, Segment 1 of the Proposed Project would continue south on Leon Road for approximately 1 mile, until it would intersect with Keller Road. At this location, Leon Road marks one of the boundaries between the City of Menifee and unincorporated Riverside County. This portion of Segment 1 of the Proposed Project would be mostly located within the City of Menifee, with the exception of a couple of wood poles located on the east side of Leon Road within unincorporated Riverside County. The existing land uses along this 1-mile portion of Segment 1 of the Proposed Project include vacant land, agriculture, residential, flood waterway structure, and electrical infrastructure.

From the intersection of Keller Road and Leon Road, Segment 1 of the Proposed Project would continue south on Leon Road for approximately 2 miles, until it would intersect with SR-79. This portion of Segment 1 of the Proposed Project would be located within unincorporated Riverside County. In addition, this portion of Segment 1 of the Proposed Project located at the intersection of SR-79 and Max Gillis Boulevard would also span the easterly boundary of the City of Murrieta. The existing land uses along this portion of Segment 1 of the Proposed Project in Riverside County and the City of Murrieta include electrical infrastructure, vacant land, residential, open space, drainage basin, agriculture, and public utilities. Leon Park is located immediately east of this portion of Segment 1 of the Proposed Project (between Pintail Way and Lantana Way). Along this portion of Segment 1 of the Proposed Project, several residential uses are located to the east and west. In addition, along this portion of Segment 1 of the Proposed Project, there are several schools located within 1 mile to the east and west. Refer to Section 4.14, Public Services, for more information regarding schools located within 1 mile of the Proposed Project.

From the intersection of SR-79 and Leon Road, Segment 1 of the Proposed Project would continue south on Leon Road for approximately 0.5 of a mile, until it reaches a TSP located at the southeast corner of Leon Road and Benton Road. The majority of this portion of Segment 1 of the Proposed Project would be located within unincorporated Riverside County, with the exception of a small portion that traverses between Max Gillis Boulevard and SR-79, which would be located within the City of Murrieta. In addition, this portion of Segment 1 of the Proposed Project that crosses SR-79 would be located within the jurisdiction of the California Department of Transportation (Caltrans). The existing land uses along this portion of Segment 1 of the Proposed Project include electrical infrastructure (e.g., power poles), vacant land, and open space. Residential uses are located to the east and west of this portion of Segment 1 of the Proposed Project. Also, some retail and commercial uses are located to the west of the TSP.

4.10.1.1.3 Segment 2 of the Proposed Project

Segment 2 of the Proposed Project would begin at the TSP located at the southeast corner of Leon Road and Benton Road and would continue southerly along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to a trail) for approximately 0.5 of a mile, until it reaches the intersection of Auld Road and Leon Road. This portion of Segment 2 of the Proposed Project

would be located within unincorporated Riverside County. The existing land uses along this portion of Segment 2 of the Proposed Project include public institutional facilities, religious facilities, vacant land, commercial, residential, retail, trails, and electrical infrastructure. French Valley University Inc. is located approximately 0.22 of a mile to the east of this portion of Segment 2 of the Proposed Project. Residential uses exist to the east of this portion of Segment 2 of the Proposed Project. Refer to Section 4.14, Public Services, and Section 4.15, Recreation, for more information regarding schools and recreation facilities located within 1 mile of the Proposed Project.

From the intersection of Auld Road and Leon Road, Segment 2 of the Proposed Project would continue south along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to Leon Road and trails) for approximately 2.1 miles, until it reaches the intersection of Murrieta Hot Springs Road and Chandler Lane. This portion of Segment 2 of the Proposed Project would be located within unincorporated Riverside County. The existing land uses along this portion of Segment 2 of the Proposed Project include public institutional facilities, industrial, vacant land, open space, residential, schools, recreation, trails, agriculture, commercial, retail, and electrical infrastructure (e.g., power poles). French Valley Airport is located approximately 0.45 of a mile to the west of this portion of Segment 2 of the Proposed Project. Central Park is located approximately 0.11 of a mile to the west of this portion of Segment 2 of the Proposed Project. In addition, there are two schools located less than 0.5 of a mile from this portion of Segment 2 of the Proposed Project, including Los Alamos Elementary School to the west and Morningstar Christian Academy to the east. Residential uses are located to the east and west of this portion of Segment 2 of the Proposed Project. Refer to Section 4.14, Public Services, and Section 4.15, Recreation, for more information regarding schools and recreation facilities located within 1 mile of the Proposed Project.

From the intersection of Murrieta Hot Springs Road and Chandler Lane, Segment 2 of the Proposed Project would continue south along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to Chandler Lane and trail) for approximately 0.26 of a mile, until it reaches a wood pole located approximately 0.10 of a mile south of the intersection of Suzi Lane and Chandler Lane in unincorporated Riverside County. The existing land uses along this portion of Segment 2 of the Proposed Project include mostly residential uses, with some vacant land, daycares, trails, and electrical infrastructure. Two daycares are located less than 0.5 of a mile from this portion of Segment 2 of the Proposed Project, Just Like Home Daycare to the east and Sarah's Sweetheart's Family Daycare to the west. Residential uses are located to the east and west of this portion of Segment 2 of the Proposed Project. Refer to Section 4.14, Public Services, for more information regarding daycares located within 1 mile of the Proposed Project.

From the wood pole located approximately 0.10 of a mile south of the intersection of Suzi Lane and Chandler Lane, Segment 2 of the Proposed Project would continue south along Valley-Auld-Triton 115 kV Subtransmission Line for approximately 0.5 of a mile, until it reaches the Terminal TSP located on the south side of Nicolas Road, approximately 250 feet west of Los Chorus Ranch Road. This portion of Segment 2 of the Proposed Project would be located mostly within the City of Temecula, with a small portion located within unincorporated Riverside County. The existing land uses along this portion of Segment 2 of the Proposed Project include vacant land, residential, trails, recreation, a school, religious facilities, commercial, retail, and electrical infrastructure. Nicolas Valley Elementary is located approximately 0.41 of a mile to

the west of this portion of Segment 2 of the Proposed Project. Several parks are located less than 0.5 of a mile from this portion of Segment 2 of the Proposed Project, including Discovery Park, Amphitheatre Park, and Overlook Park to the west; Joseph Park and Nakayama Park to the southwest; and Riverton Park to the east. Residential uses are located to the east and west of this portion of Segment 2 of the Proposed Project. Refer to Section 4.14, Public Services, and Section 4.15, Recreation, for more information regarding schools and recreation facilities located within 1 mile of the Proposed Project.

4.10.1.1.4 Potential Material Staging Yards

SCE identified six potential staging yard locations that could be used during Proposed Project construction. However, SCE determined that only two sites would be utilized. The final decision on which sites to use would be evaluated and decided upon by SCE's contractor prior to the start of construction. Their locations and existing land uses are summarized below. All six of these potential material staging yards have been used by SCE or its contractors previously for staging or material storage. Note that, consistent with GO 131-D, none of the six potential staging yard locations would create any significant land use impacts, particularly because they would not create any inconsistencies with applicable land use regulation.

4.10.1.1.4.1 Material Staging Yard 1

Material Staging Yard 1 would be located in the City of Menifee at the southwest corner of a private road and Menifee Road. The site is an SCE fee-owned parcel, currently used as a material/maintenance yard, and is approximately 2 acres in size.

4.10.1.1.4.2 Material Staging Yard 2

Material Staging Yard 2 would be located in unincorporated Riverside County, approximately 700 feet west of Van Gaale Lane on the south side of Benton Road. The site is currently a vacant parcel that is approximately 2 acres in size. French Valley Airport is located less than 1 mile south of this parcel.

4.10.1.1.4.3 Material Staging Yard 3

Material Staging Yard 3 would be located in the City of Perris, approximately 150 feet north of Case Road, 250 feet east of G Street on Walker Avenue. The site is currently a vacant parcel, with the exception of some industrial equipment, and is approximately 2.4 acres in size. Perris Valley Airport is located approximately 0.12 of a mile south of this parcel.

4.10.1.1.4.4 Material Staging Yard 4

Material Staging Yard 4 would be located in the City of Menifee, approximately 350 feet south of Ethanac Road on the west side of Antelope Road. The site is currently a vacant parcel that is approximately 4.6 acres in size.

4.10.1.1.4.5 Material Staging Yard 5

Material Staging Yard 5 would be located in the City of Menifee, on the east side of Menifee Road just south of SR-74. This proposed material staging yard is located within SCE's Menifee Service Center and is currently used as a material/maintenance yard.[3]

4.10.1.1.4.6 Material Staging Yard 6

Material Staging Yard 6 would be located in the City of Menifee, within the existing Valley 500/115 kV Substation property on the west side of Menifee Road immediately south of SR-74. The existing land uses at this site include electrical power facilities.[1]

4.10.1.2 Planned Land Use Designations and Zoning

A summary of the planned land use designations and zoning is provided in Table 4.10-1 Planned Land Use Designations and Zoning by Proposed Project Component. Planned land use designations applicable to the Proposed Project include adopted General Plan land use designations, Area Plan land use designations, and Specific Plan land use designations from the various jurisdictions.

Furthermore, Figure 4.10-1 General Plan Land Use Designations, Figure 4.10-2 Zoning, Figure 4.10-3 Specific Plan Land Use Designations, and Figure 4.10-4 Area Plan Designations, all illustrate the planned land use designations and zoning within and adjacent to the Proposed Project area.

As shown in Table 4.10-1 Planned Land Use Designations and Zoning by Proposed Project Component, Segment 1 of the Proposed Project is located within six Specific Plan areas (two of which extend into the City of Menifee) and three Area Plan areas within unincorporated Riverside County, and one Specific Plan area within the City of Perris. Segment 2 of the Proposed Project is located within four Specific Plan areas and one Area Plan area within unincorporated Riverside County, and one Specific Plan area within the City of Temecula. The Specific Plan areas are shown in Figure 4.10-3 Specific Plan Land Use Designations. As shown in this figure, Segment 1 of the Proposed Project would cross through the following Specific Plans: Menifee North (#260), Menifee Valley Ranch (#301), Winchester Hills (#293), French Valley (#312), Dutch Village (#106), and Quinta Do Lago (#284). Also, as shown in this figure, Segment 2 of the Proposed Project would cross through the following Specific Plans: Crown Valley Village (#238), Borel Airpark (#265), Rancho Bella Vista (#184), and Winchester Properties/Silverhawk (#213). In addition, as shown in this figure, potential Material Staging Yard 3 would be located within the Perris Downtown Specific Plan. Each Specific Plan has its own approved land use map. Specific Plans are tools for the implementation of the General Plan and establish a link between implementing policies of the General Plan and the individual development proposals in a defined area.

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[3] This is an existing SCE facility that stages materials for projects located within the surrounding regions. There would be no dedicated acreage or location within this existing site for use as a possible material staging yard for the Proposed Project.

Table 4.10-1 Planned Land Use Designations and Zoning by Proposed Project Component

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
Valley 500/115 kV Substation					
Valley 500/115 kV Substation, located on Menifee Road immediately south of SR-74 in the City of Menifee	City of Menifee	City of Menifee General Plan —Public/Quasi Public Facilities	Not Applicable	Not Applicable	Riverside County Zoning —Rural Residential
Segment 1 of the Proposed Project					
From the south side of the existing Valley 500/115 kV Substation, extending easterly on a private road to Briggs Road	City of Menifee	City of Menifee General Plan —Public/Quasi Public Facilities —Business Park —Specific Plan	Not Applicable	Menifee Valley Ranch Specific Plan —Open Space-Conservation —Residential (5.1-8R) —Open Space-Recreation	Riverside County Zoning Code[1] —Manufacturing - Service Commercial —Rural Residential —Specific Plan Zone

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of a private road and Briggs Road, extending south on Briggs Road to Matthews Road	City of Menifee; Riverside County	City of Menifee General Plan —Specific Plan Riverside County General Plan —Medium Density Residential —Open Space–Recreation —Public Facility	Harvest Valley/ Winchester Area Plan —Medium Density Residential —Open Space–Recreation —Public Facility	Menifee Valley Ranch Specific Plan —Medium High Density Residential —Open Space-Conservation Menifee North Specific Plan —Drainage Basin —Medium Density Residential —Open Space–Recreation —Public Facility	Riverside County Zoning Code[1] —Specific Plan Zone
From the intersection of Briggs Road and Matthews Road, extending southeasterly and adjacent to Matthews Road to Grand Avenue	Riverside County; BNSF[4]	Riverside County General Plan —Medium Density Residential —Light Industrial —Commercial Retail–Public Facilities	Harvest Valley/ Winchester Area Plan —Medium Density Residential —Light Industrial —Commercial Retail–Public Facilities	Menifee North Specific Plan —Medium Winchester Hills Specific Plan —-Commercial	Riverside County Zoning —Specific Plan Zone —Light Agriculture with Poultry —Rural Residential

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of Grand Avenue and Leon Road, extending south on Leon Road to Scott Road	Riverside County; BNSF[4]	Riverside County General Plan —Light Industrial —Public Facilities —Open Space–Recreation —Commercial Retail —High Density Residential —Medium Density Residential —Medium High Density Residential —Rural Mountainous —Rural Community–Estate Density Residential —Rural Residential	Harvest Valley/ Winchester Area Plan —Light Industrial —Public Facilities —Open Space–Recreation —Commercial Retail —High Density Residential —Medium Density Residential —Medium High Density Residential —Rural Mountainous —Estate Residential —Rural Residential Sun City/Menifee Valley Area Plan —Rural Mountainous —Estate Residential	Winchester Hills Specific Plan —Open Space —Medium Density Residential —High Density Residential —Commercial —Low Density Residential —Parks	Riverside County Zoning —Rural Residential —Manufacturing–Medium —One-Family Dwellings —Specific Plan Zone —Light Agriculture

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of Scott Road and Leon Road, continuing south on Leon Road to Keller Road	City of Menifee; Riverside County; City of Murrieta Sphere of Influence (SOI)[2]	City of Menifee General Plan —Rural Residential 2 Acre Minimum Riverside County General Plan —Rural Community–Estate Density Residential	Sun City/Menifee Valley Area Plan —Rural Residential Southwest Area Plan —Low Density Residential —Medium Density Residential —Open Space–Conservation —Light Industrial —Commercial Retail	Not Applicable	Riverside County Zoning[1] —Rural Residential

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of Keller Road and Leon Road, continuing south to SR-79	Riverside County; City of Murrieta SOI[2]	Riverside County General Plan —Low Density Residential —Rural Residential —Medium Density Residential —Open Space–Conservation —Commercial Retail	Southwest Area Plan —Low Density Residential —Rural Residential —Medium Density Residential —Open Space–Conservation —Commercial Retail	French Valley Specific Plan —Medium Density Residential —Open Space/ Expanded Parkways Dutch Village Specific Plan —Very Low Density Residential —Low Density Residential —Industrial —Open Space	Riverside County Zoning —Rural Residential —Specific Plan Zone —One-Family Dwellings —Open Area Combining Zone–Residential Developments —Light Agriculture —Scenic Highway Commercial

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of SR-79 and Leon Road, continuing south on Leon Road to a TSP, located at the southeast corner of Leon Road and Benton Road	Riverside County; City of Murrieta; City of Temecula SOI[3]; Caltrans[5]	Riverside County General Plan —Commercial Retail —Open Space–Recreation —Medium High Density Residential —Business Park City of Murrieta General Plan —Commercial	Southwest Area Plan —Commercial Retail —Open Space–Recreation —Medium High Density Residential —Business Park	Dutch Village Specific Plan —Open Space/ Commercial Area Quinta Do Lago Specific Plan —Commercial/ Business Park —Medium-High Density Residential —Meadows/ Greenbelt —Industrial Park	Riverside County Zoning —Specific Plan Zone —Scenic Highway Commercial City of Murrieta Zoning —Regional Commercial

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
Segment 2 of the Proposed Project					
From a TSP located at the southeast corner of Leon Road and Benton Road, continuing south along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to a trail) to the intersection of Auld Road and Leon Road	Riverside County; City of Temecula SOI[6]	Riverside County General Plan —Business Park —Open Space-Conservation —Light Industrial —Commercial Retail	Southwest Area Plan —Business Park —Very Low Density Residential (1 acre minimum lot size)	Dutch Village Specific Plan —Open Space —Very Low Density Residential (2.5 acre minimum lot size) Quinta Do Lago Specific Plan —Industrial Park —Office/Industrial Park	Riverside County Zoning —Specific Plan Zone —Open Area Combining Zone – Residential Developments —Scenic Highway Commercial

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of Auld Road and Leon Road, continuing south along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to Leon Road and trails) to the intersection of Murrieta Hot Springs Road and Chandler Lane	Riverside County; City of Temecula SOI[6]	Riverside County General Plan —Commercial Office —Business Park —Medium Density Residential —Medium High Density Residential —Open Space-Conservation	Southwest Area Plan —Business Park —Public Facilities —Open Space-Conservation	Borel Airpark Specific Plan —Industrial Park —Open Space —Restricted Light Industrial —Commercial Rancho Bella Vista Specific Plan —Medium Residential Winchester Properties/Silverhawk Specific Plan —Open Space —Medium Residential	Riverside County Zoning —Scenic Highway Commercial —Light Agriculture —Specific Plan Zone

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
From the intersection of Murrieta Hot Springs Road and Chandler Lane, continuing south along Valley-Auld-Triton 115 kV Subtransmission Line (parallel to Chandler Lane and trail) to the Terminal TSP located on the south side of Nicolas Road, approximately 250 feet west of Los Chorus Ranch Road	City of Temecula	City of Temecula General Plan —Low Medium Residential (3–6 dwelling units per acre maximum) —Open Space —Very Low Residential (0.2-0.4 dwelling units per acre maximum)	Not Applicable	Roripaugh Specific Plan —Low Medium Density Residential —Open Space-Landscape	City of Temecula Zoning —Public Park and Recreation —Specific Plan Zone —Very Low Density Residential
Material Staging Yards					
Material Staging Yard 1, located at the southwest corner of a private road and Menifee Road	City of Menifee	City of Menifee General Plan —Business Park	Not Applicable	Not Applicable	Riverside County Zoning —Rural Residential
Material Staging Yard 2, located approximately 700 feet west of Van Gaale Lane on the south side of Benton Road	Riverside County; City of Temecula SOI[3]	Riverside County General Plan —Light Industrial	Southwest Area Plan —Light Industrial	Quinta Do Lago —Industrial Park	Riverside County Zoning —Manufacturing–Service Commercial
Material Staging Yard 3, located approximately 150 feet north of Commercial Road, 250 feet east of G Street on Walker Avenue	City of Perris	City of Perris General Plan —Downtown Specific Plan	Not Applicable[7]	Downtown Specific Plan —Employment Plaza	City of Perris Zoning —Downtown Specific Plan

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning
Material Staging Yard 4, located approximately 350 feet south of Ethanac Road on the west side of Antelope Road	City of Menifee	City of Menifee General Plan —Heavy Industrial	Not Applicable	Not Applicable	Riverside County Zoning —Rural Residential
Material Staging Yard 5, located on the east side of Menifee Road just south of SR-74	City of Menifee	City of Menifee General Plan —Public/Quasi Public Facilities	Not Applicable	Not Applicable	Riverside County Zoning —Rural Residential
Material Staging Yard 6, located within the existing Valley 500/115 kV Substation property on Menifee Road immediately south of SR-74	City of Menifee	City of Menifee General Plan —Public/Quasi Public Facilities	Not Applicable	Not Applicable	Riverside County Zoning —Rural Residential

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Area Plan Land Use Designation	Specific Plan Land Use Designation	Zoning

Notes:

[1] Although the City of Menifee is an incorporated city and recently adopted a General Plan, it defers to Riverside County's Zoning Code.

[2] This portion of Segment 1 of the Proposed Project is located within the City of Murrieta's SOI. Although Riverside County is responsible for administration of land use decisions within the SOI (see page 3-2 of the City of Murrieta's General Plan Land Use Element), it still is considered part of the City of Murrieta's "Planning Area," and thus is acknowledged accordingly.

[3] This portion of Segment 1 of the Proposed Project is located within the City of Temecula's SOI. Although Riverside County is responsible for administration of land use decisions within the SOI (see page LU-38 of the City of Temecula's General Plan Land Use Element), it still is considered part of the City of Temecula's "Planning Area," and thus is acknowledged accordingly. According to the City of Temecula's General Plan Land Use Element, the City of Temecula must be consulted regarding any proposed development projects within their SOI.

[4] Although this portion of Segment 1 of the Proposed Project is located within the jurisdiction of BNSF where it crosses a BNSF railroad, BNSF does not designate land use or zoning designations. These designations are designated and regulated by the applicable city and/or county.

[5] Although SR-79 is within the jurisdiction of Caltrans, Caltrans does not designate land use or zoning designations. These designations are assigned by the applicable city and/or county.

[6] This portion of Segment 2 of the Proposed Project is located within the City of Temecula's SOI. Although Riverside County is responsible for administration of land use decisions within the SOI (see page LU-38 of the City of Temecula's General Plan Land Use Element), it still is considered part of the City of Temecula's "Planning Area," and thus is acknowledged accordingly. According to the City of Temecula's General Plan Land Use Element, the City of Temecula must be consulted regarding any proposed development projects within their SOI.

[7] The City of Perris (including Material Staging Yard 3) is located within Riverside County's Mead Valley Area Plan. However, the City has jurisdiction because it is incorporated and has an adopted General Plan and Zoning Code. Thus, there are no Area Plan Land Use designations where Mead Valley Area Plan overlaps with the City of Perris because the City has jurisdiction and its planning designations and zoning therefore apply. The Mead Valley Area Plan policies would also not apply because Riverside County does not have jurisdiction.

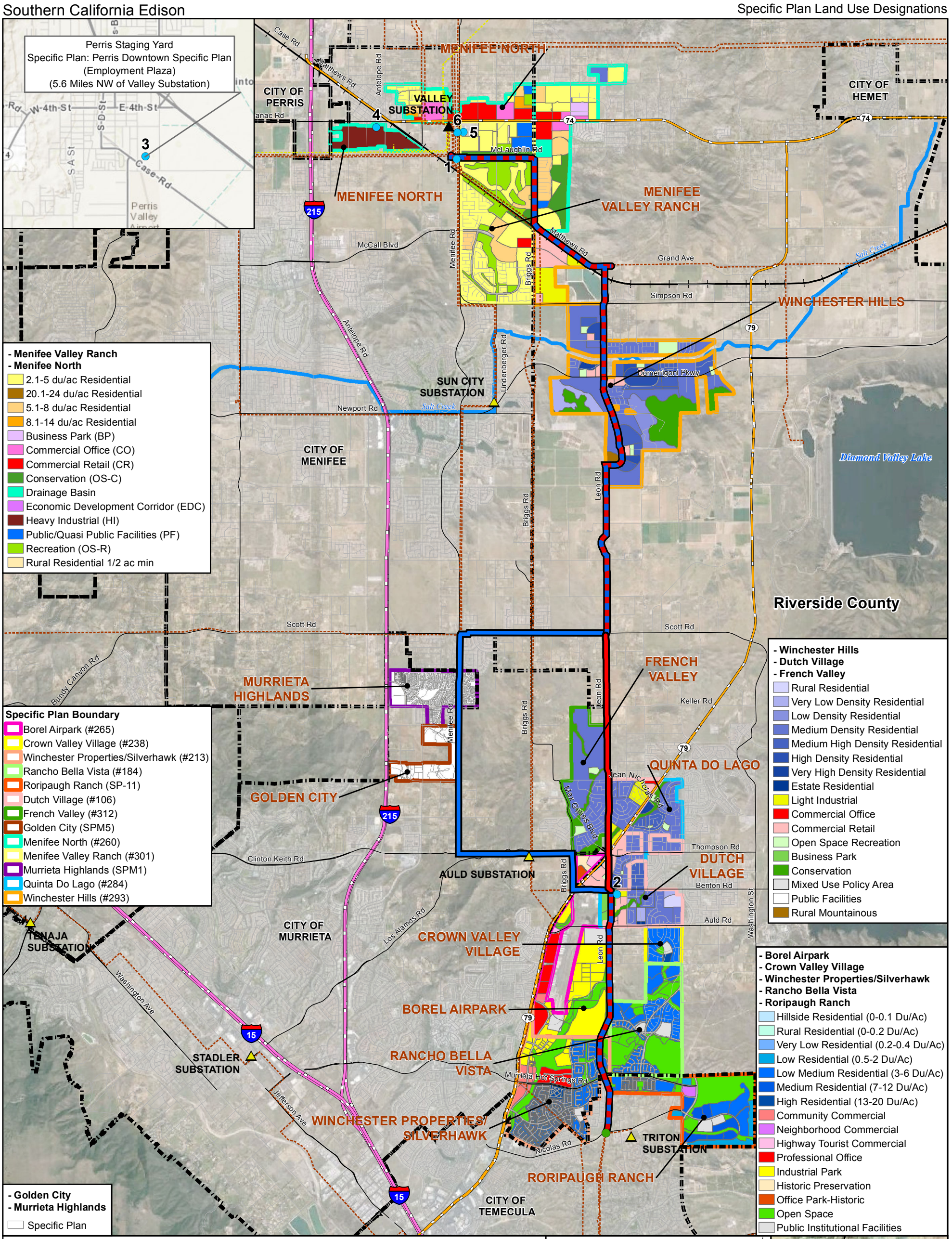
Sources: City of Menifee and The Planning Center, 2010; City of Menifee, 2013a and 2013b; City of Murrieta, 2010 and 2011; City of Perris, 2012a and 2012b; City of Perris and Digital Map Products, 2011; Riverside County, 2006, 2008a, 2008b, 2010, 2012; Riverside County TLMA/GIS, 2008a, 2008b; City of Temecula, 2005a, 2005b, 2014a, and 2014b.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.10-3

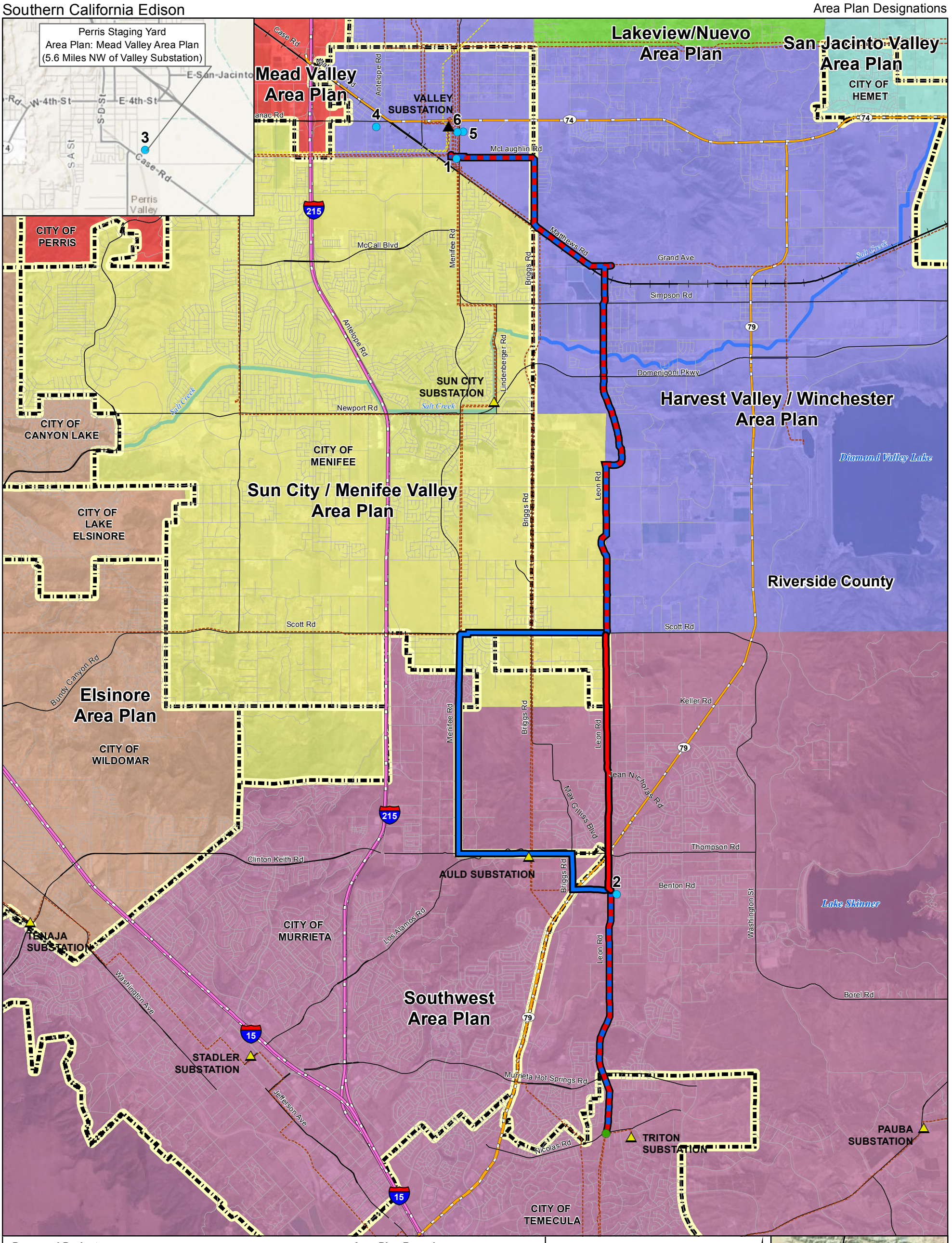
Southern California Edison

Specific Plan Land Use Designations



VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.10-4**

Southern California Edison Area Plan Designations



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Potential Material Staging Yards
- Staging Yards 1-6

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line
- City Boundary

Area Plan Boundary
- Elsinore
- Lakeview / Nuevo
- Harvest Valley / Winchester
- Mead Valley
- San Jacinto Valley
- Southwest
- Sun City / Menifee Valley

Sources: SCE, 2014; Riverside County, 2014; Aerial Image: Google Earth Pro, 2014

0 1 Miles

1:80,000

N

8/28/2014

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Also, as shown in Table 4.10-1 Planned Land Use Designations and Zoning by Proposed Project Component, Segment 1 of the Proposed Project would be located within unincorporated Riverside County's Harvest Valley/Winchester Area Plan, Sun City/Menifee Valley Area Plan, and Southwest Area Plan. Also, as shown in this table, Segment 2 of the Proposed Project would be located within unincorporated Riverside County's Southwest Area Plan. The unincorporated Riverside County Area Plans are shown in Figure 4.10-4 Area Plan Designations. Area Plans are composed of a land use map and other illustrative materials relevant to the area, as well as specific policy direction that are required to provide guidance unique to each area (Riverside County, 2003a). The Area Plans incorporate a streamlined land use designation system, representing a full spectrum of categories that relate to the natural or economic characteristics of the land in Riverside County.

4.10.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.10.2.1 Federal

Federal Aviation Administration

Under Federal Aviation Administration (FAA) Title 14 Code of Federal Regulations, Part 77, Objects Affecting Navigable Airspace, SCE could be required to file a Notice of Proposed Construction or Alteration (Form 7460-1) with the FAA. This requirement also is discussed in Section 4.8, Hazards and Hazardous Materials.

4.10.2.2 State

Regarding land use compatibility, Section 51238 of the California Government Code indicates that electrical facilities are compatible with the Williamson Act and other agricultural uses; see Section 4.2, Agriculture and Forestry Resources, for further discussion regarding agricultural uses. There are no state regulations related to land use and planning that would apply to the Proposed Project.

4.10.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not

have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

Riverside County General Plan

As described previously, several portions of the Proposed Project would be located in unincorporated Riverside County. Riverside County's General Plan is two-tiered; the General Plan covers the entire unincorporated portion of the county and is augmented by 19 more detailed Area Plans, as well as undeveloped desert areas and March Air Reserve Base (Riverside County, 2003a). The objective of the General Plan is to manage the overall pattern of development, while the Area Plans provide more focus at the community level, to maintain community identity and quality of life.

The Land Use Element and Multipurpose Open Space Element of Riverside County's General Plan, in addition to the Harvest Valley/Winchester Area Plan, Sun City / Menifee Area Plan and Southwest Area Plan, govern land use in the county and the Proposed Project area (notwithstanding the CPUC's exclusive jurisdiction over investor-owned public utility facilities, described earlier in this section). The Riverside County Land Use Element presents goals and policies that guide future geographic patterns of development in the county. The Multipurpose Open Space Element outlines the county's intentions for protecting and preserving natural resources, agriculture, open space, and recreational opportunities (Riverside County, 2003a). Relevant land use goals and policies listed in the Riverside County General Plan include the following:

<u>Land Use</u>

- LU 5.4: Ensure that development and conservation land uses do not infringe upon existing public utility corridors, including fee owned rights-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
- LU 13.5: Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground
- LU 25.1: Accommodate the development of public facilities in areas appropriately designated by the General Plan and area plan land use maps

<u>Open Space</u>

- OS 20.2: Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas

<u>Harvest Valley/Winchester Area Plan</u>

Segment 1 of the Proposed Project would be located within the Harvest Valley/Winchester Area Plan starting from the intersection of a private road and Briggs Road, extending south on Briggs Road to Matthews Road, continuing in a southeasterly direction adjacent to Matthews Road until it would intersect with Grand Avenue, extending east along Grand Avenue until it would

intersect with Leon Road, and then continuing south on Leon Road until the intersection of Scott Road and Leon Road. This plan contains no specific land use goals or policies relevant to electric utility projects.

Sun City/Menifee Area Plan

Portions of Segment 1 of the Proposed Project would be located within the Sun City/Menifee Area Plan starting from Leon Road (approximately 0.30 of a mile southwest of Ano Crest Road) and continuing south on Leon Road until the intersection of Keller Road and Leon Road. This plan contains no specific land use goals or policies relevant to electric utility projects.

Southwest Area Plan

The Southwest Area Plan guides the evolving character of the unincorporated land surrounding the cities of Murrieta and Temecula and is an extension of the Riverside County General Plan and Vision. Segment 1 of the Proposed Project would be located within the Southwest Area Plan starting from the intersection of Scott Road and Leon Road, and continuing south on Leon Road to a TSP located at the southeast corner of Leon Road and Benton Road. Segment 2 of the Proposed Project would be located within the Southwest Area Plan starting from the TSP located at the southeast corner of Leon Road and Benton Road, and continuing south on Leon Road until extending approximately 0.10 of a mile south of the intersection of Suzi Lane and Chandler Lane. This plan contains no specific land use goals or policies relevant to electric utility projects.

City of Menifee General Plan

As described previously, Segment 2 of the Proposed Project would not be located within the City of Menifee. However, portions of Segment 1 of the Proposed Project would be located within the City of Menifee. The City of Menifee General Plan was adopted on December 20, 2013 (City of Menifee, 2013a). Relevant land use goals and policies listed in the City of Menifee's General Plan include the following:

- LU-1.8: Ensure new development is carefully designed to avoid or incorporate natural features, including washes, creeks, and hillsides
- LU-3.1: Work with utility providers in the planning, designing, and siting of distribution and support facilities to comply with the standards of the General Plan and Development Code
- LU-3.2: Work with utility providers to increase service capacity as demand increases
- LU-3.4: Require that approval of new development be contingent upon the project's ability to secure appropriate infrastructure services
- LU-3.5: Facilitate the shared use of right-of-way, transmission corridors, and other appropriate measures to minimize the visual impact of utilities infrastructure throughout Menifee

City of Murrieta General Plan

As described previously, Segment 2 of the Proposed Project would not be located within the City of Murrieta. However, a small portion of Segment 1 of the Proposed Project would be located within the City of Murrieta. The Murrieta City Council voted to adopt General Plan 2035 on July

19, 2011. Relevant land use goals and policies listed in the City of Murrieta's General Plan include the following:

- LU-10.4: Discourage physical barriers, such as arterial streets, transit or utility rights-of way, or very long blocks without through-streets, between and within neighborhoods and neighborhood centers. If physical barriers are unavoidable, provide safe and comfortable crossings for pedestrians and cyclists

City of Perris General Plan

The potential Material Staging Yard 3 would be located within the City of Perris. The City of Perris updated six of the seven mandatory General Plan Elements in 2005–2006, including the Land Use Element (City of Perris, 2012a). According to the City's updated Land Use Element (approved on April 26, 2005), the City of Perris is divided into ten (10) Planning Areas (City of Perris, 2005). The potential material staging yard is located within Planning Area 6 – Downtown Specific Plan Area (City of Perris, 2005). The Downtown Specific Plan was adopted in 1993 and updated in 2012 with the objective of revitalizing the area with an emphasis on economic development (City of Perris, 2012b). The City of Perris General Plan and Downtown Specific Plan do not contain any specific land use goals or policies relevant to electric utility projects.

City of Temecula General Plan

As described previously, Segment 1 of the Proposed Project would not be located within the City of Temecula. However, a portion of Segment 2 of the Proposed Project would be located within the City of Temecula. The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2014a). Relevant land use goals and policies listed in the City of Temecula's General Plan include the following:

- Policy 1.1: Review all proposed development plans for consistency with community goals, policies and implementation programs of this General Plan, and consider potential impacts on surrounding land uses and infrastructure
- Policy 5.1: Consider the compatibility of proposed projects on surrounding uses in terms of the size and configuration of buildings, use of materials and landscaping, preservation of existing vegetation and landform, the location of access routes, noise impacts, traffic impacts, and other environmental conditions
- Policy 5.3: Require proposed development to evaluate the incremental traffic impacts on local roads throughout the proposed project phasing in order to ensure that any adverse impacts to local roads in residential areas are avoided or adequately mitigated
- Policy 6.1: Preserve the natural aesthetic quality of hillsides and reduce hazards associated with hillside development within the Planning Area
- Policy 8.3 Ensure development projects within the French Valley Airport area of influence comply with the Airport Land Use Compatibility Plan (ALUCP) for the Airport, and refer all land use actions identified within the ALUCP to the Airport Land Use Commission for mandatory review
- Policy 8.4: Ensure that development proposals within the French Valley Airport area of influence fully comply with the permit procedures specific in federal and state law, with the referral requirements of the Airport Land Use Commission (ALUC), and with the

conditions of approval imposed or recommended by the FAA and ALUC. This requirement is in addition to all other City development review requirements

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) was adopted by Riverside County on June 17, 2003, and is a comprehensive, multijurisdictional plan focusing on conservation of species and their associated habitats in Western Riverside County. This plan is one of several large, multijurisdictional habitat-planning efforts in southern California, with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region (Riverside County, 2003b). The WRCMSHCP serves as a habitat conservation plan, pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001.

4.10.3 Significance Criteria

The significance criteria for assessing the impacts to land use and planning are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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, 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
- Conflict with any applicable habitat conservation plan or natural community conservation plan

4.10.4 Impact Analysis

4.10.4.1 Would the project physically divide an established community?

Construction

No Impact. Construction activities associated with the Proposed Project would occur adjacent to some residential subdivisions in unincorporated areas; however, pole installation and wire stringing would occur within a combination of existing and newly acquired easements and franchise areas (rights-of-way [ROW]), or existing roadways. Therefore, because the Proposed Project would include poles separated by distance and conductor suspended overhead, the Proposed Project would not create new physical barriers or physically divide an established community. Similarly, each of the six potential staging yard locations has been used by SCE in the past, so the use of any two staging yard locations would not introduce a new division of an established community. No impact would occur.

Operation

No Impact. Operations and Maintenance (O&M) of the Proposed Project would not physically divide an established community. As noted above, in the areas where the Proposed 115 kV subtransmission line would be adjacent to residential subdivisions, it would be located within a combination of existing and newly acquired easements and SCE ROW, or would follow existing roadways, which are already existing physical markers or divisions within the communities. The operation of the Proposed Project would not create a new physical barrier or physically divide an established community. Thus, no impact would occur.

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

Construction

No Impact. The CPUC's jurisdictions over electric power line projects and substations exempts the Proposed Project under G.O. 131-D from local land use regulations. Therefore, local jurisdictions are pre-empted from regulating the Proposed Project pursuant to G.O. 131-D. Construction of the Proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project. In addition, construction of the Proposed 115 kV subtransmission line, reconductoring of the Valley-Auld-Triton 115 kV Subtransmission Line, utilization of existing unpaved access roads where dedicated public streets are not available, and use of access locations for short distances (on average approximately 22 feet wide and 50 feet long to pole sites) would not create substantial land use impacts or conflict with existing and proposed land uses. Therefore, no impact would occur.

Operation

No Impact. The CPUC's jurisdictions over electric power line projects and substations exempts the Proposed Project under G.O. 131-D from local land use regulations. Additionally, because the Proposed Project is exempt as stated above, operation and maintenance of the Proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project. In addition, during O&M of the Proposed Project, routine inspections and emergency repair would require the use of vehicles and equipment. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but inspection usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. O&M of the Proposed Project would not conflict with existing and proposed nearby agriculture, residential, open space, recreation, trails, public institutional facilities, schools, religious facilities, commercial, retail, and industrial uses. Therefore, O&M of the Proposed Project would generally be compatible with Riverside County and the cities of

Menifee, Murrieta, Temecula, and Perris land use, zoning, and future planning regulations adopted for the purpose of avoiding or mitigating an environmental impact.

The Proposed Project may be inconsistent with the following local policies from the Riverside County General Plan:

- LU 13.5: Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground
- OS 20.2: Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas

A majority of the distribution portion of the Proposed Project would be relocated onto new overhead structures, which may conflict with LU 13.5 where the Proposed Project is visible from designated and eligible state and county scenic highways; however, as noted previously pursuant to G.O. 131-D, this project is exempt from local land use and zoning regulations and permitting.

The Proposed Project would extend utilities into Open Space-Conservation designated areas, which may conflict with OS 20.2. Specifically, Segment 1 of the Proposed Project would be located in Open Space-Conservation designated areas along a private road toward Briggs Road, along Leon Road just north of the intersection of Max Gillis Boulevard and SR-79. Segment 2 of the Proposed Project would be located in Open Space-Conservation designated areas along Leon Road just north of Auld Road and along a trail just south of Promontory Parkway toward the intersection of Murrieta Hot Springs Road and Chandler Lane. Pursuant to G.O. 131-D, the CPUC's jurisdiction over electric power line projects preempts local land use agencies from regulating the Proposed Project; therefore, no significant impact to land use or planning would occur. O&M of the Proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project. Therefore, no mitigation measures would be necessary.

4.10.4.3 Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

Construction

No Impact. Temporary construction activities would occur within the established WRCMSHCP boundary. SCE is a participating special entity in the WRCMSHCP, which strives for avoidance and minimization of adverse effects of development actions to sensitive species and habitats through survey, assessment, and planning. To ensure consistency with the WRCMSHCP, SCE would consult with Riverside County for siting of facilities associated with the Proposed Project within the plan boundaries (see Section 4.4, Biological Resources). Temporary construction activities associated with the Proposed Project would not conflict with a habitat conservation plan or natural community conservation plan; therefore, no impact would occur.

Operation

No Impact. O&M of the Proposed Project would be located within the established WRCMSHCP boundary. However, SCE is a participating special entity in this WRCMSHCP and would ensure compliance with the facility siting conditions established within the plan boundary, as discussed in Section 4.4, Biological Resources. O&M of the Proposed Project would not conflict with or impact a habitat conservation plan or natural community conservation plan; therefore, no impact would occur.

4.10.5 Applicant Proposed Measures

Because the CPUC's jurisdiction over electric power line projects and substations exempts the Proposed Project under G.O. 131-D from local land use regulations, no impacts to land use or planning would occur as a result of the Proposed Project, and therefore no avoidance and minimization measures are proposed.

4.10.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

In the City of Murrieta, Segment 1 the Alternative Project would cross through two Specific Plan areas: the Murrieta Highlands Specific Plan area and the Golden City Specific Plan area. However, the existing land uses and planned land use designations are similar to the existing land uses and planned land use designations as indicated for Segment 1 the Proposed Project. In addition, Segment 1 of the Alternative Project would have the same type of subtransmission line structures as Segment 1 of the Proposed Project. The southernmost portion of Segment 1 of the Alternative Project, south of Keller Road, abuts existing and planned agricultural and commercial uses, in addition to residential development and some open space areas within those developments. Segment 1 of the Alternative Project follows existing road ROW and would not divide or create a new physical barrier to or between established communities. Therefore, construction and O&M of Segment 1 of the Alternative Project would not physically divide an established community. No impact would occur.

Segment 1 of the Alternative Project would be subject to the same regulatory policies as Segment 1 of the Proposed Project and would present the same two land use policy inconsistencies. However, as stated earlier, the CPUC's jurisdiction over electric power line projects and substations would preempt local land use agencies from applying land use regulations to the Alternative Project. Therefore, construction and O&M of Segment 1 of the Alternative Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over Segment 1 of the Alternative Project. Thus, no impact would occur.

Similar to Segment 1 of the Proposed Project, Segment 1 of the Alternative Project would adhere to the WRCMSHCP and would not conflict with or impact a habitat conservation plan or natural community conservation plan. Therefore, no impact would occur.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

In the City of Murrieta, Segment 2 of the Alternative Project would cross through two Specific Plan areas: the Borel Airpark Specific Plan area and the Quinta Do Lago Specific Plan area. However, the existing land uses and planned land use designations are similar to the existing

land uses and planned land use designations as indicated for Segment 2 of the Proposed Project. In addition, Segment 2 of the Alternative Project would have the same type of subtransmission line structures as Segment 2 of the Proposed Project. Segment 2 of the Alternative Project would be located adjacent to existing and planned residential, commercial, retail, and industrial uses. Segment 2 of the Alternative Project would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing road ROW and would not divide or create a new physical barrier to or between established communities. Therefore, construction and O&M of Segment 2 of the Alternative Project would not physically divide an established community. No impact would occur.

Segment 2 of the Alternative Project would be subject to the same regulatory policies as Segment 2 of the Proposed Project and would conflict with the same Riverside County General Plan policies LU 13.5 and OS 20.2 issues. However, as stated earlier, the CPUC's jurisdiction over electric power line projects and substations would preempt local land use agencies from applying land use regulations to the Alternative Project. Therefore, construction and O&M of Segment 2 of the Alternative Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over Segment 2 of the Alternative Project. Thus, no impact would occur.

Similar to Segment 2 of the Proposed Project, Segment 2 of the Alternative Project would adhere to the WRCMSHCP and would not conflict with or impact a habitat conservation plan or natural community conservation plan. Therefore, no impact would occur.

4.10.7 References

City of Menifee. 2013a. City of Menifee General Plan – Land Use Element. Available: http://www.cityofmenifee.us/index.aspx?NID=231. Accessed May 6, 2014.

———. 2013b. City of Menifee General Plan – Land Use Map. Available: http://www.cityofmenifee.us/DocumentCenter/View/1013. Accessed May 6, 2014.

———. 2014. City of Menifee Community View. Available: http://maps.digitalmapcentral.com/production/VECommunityView/cities/Menifee/index.aspx. Accessed May 18, 2014.

City of Menifee and The Planning Center. 2010. Existing Land Use Inventory Map. Available: http://cityofmenifee.us/DocumentView.aspx?DID=194. Accessed January 11, 2013.

City of Murrieta. 2011. Murrieta General Plan 2035. Available: http://www.murrieta.org/cityhall/planning/general.asp. Accessed: January 2013 and May 2014.

———. 2010. Murrieta General Plan/Zoning Map. Adopted July 20, 1999. Amended February 7, 2006. Available: http://www.murrieta.org/civica/filebank/blobdload.asp?BlobID=3296. Accessed January 11, 2013.

City of Perris. 2005. City of Perris General Plan – Land Use Element. Available: http://www.cityofperris.org/city-hall/general-plan/Land_Use_Element.pdf. Accessed January 29, 2013.

———. 2012a. General Plan Webpage. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed January 29, 2013.

———. 2012b. Perris Downtown Specific Plan. Available: http://www.cityofperris.org/city-hall/specific-plans/DTP-EIR/2012_PerrisDowntownSpecPlanFinal.pdf. Accessed January 11, 2013.

City of Perris and Digital Map Products. 2011. City of Perris Community View. Available: http://maps.digitalmapcentral.com/production/vecommunityview/cities/perris/index.aspx Accessed January 11, 2013.

City of Temecula. 2005a. City of Temecula General Plan – Land Use Element. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed May 16, 2014.

———. 2005b. City of Temecula General Plan – Land Use Policy Map. Adopted April 12, 2005. Available: http://www.cityoftemecula.org/NR/rdonlyres/0627D42B-8BF8-4971-80A0-AF411E8DF02D/0/GPLU.pdf. Accessed May 7, 2014.

———. 2014a. City of Temecula General Plan Webpage. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed May 14, 2014.

———. 2014b. City of Temecula's GIS Map Viewer. Available: http://www.cityoftemecula.org/Temecula/Government/IT/GIS.htm. Accessed May 14, 2014.

Google Earth, Pro. 2012 and 2014.

Google Maps. 2013 and 2014. Available: http://maps.google.com/. Accessed January 11, 2013 and May 19, 2014.

Riverside County. 2003a. Riverside County General Plan. Adopted October 7, 2003. Available: http://www.rctlma.org/genplan/content/gp.aspx. Accessed December 14, 2012.

———. 2003b. Western Riverside County Multiple Species Habitat Conservation Plan. Adopted June 17, 2003. Available: http://www.rctlma.org/mshcp/. Accessed December 14, 2012.

———. 2006. Riverside County Harvest Valley/Winchester Area Plan (as amended). Available: http://www.rctlma.org/genplan/general_plan_2008/ area_plan_vol_1/ Harvest_Valley_Winchester_Area_Plan_2008.pdf. Accessed December 14, 2012.

———. 2008a. Riverside County Southwest Area Plan (as amended). Available: http://www.rctlma.org/genplan/content/ap1/swap.html. Accessed December 14, 2012.

———. 2008b. Riverside County Sun City/Menifee Area Plan (as amended). Available: http://www.rctlma.org/genplan/general_plan_2008/ area_plan_vol_1/Sun_City_Menifee_Area_Plan_2008.pdf. Accessed December 14, 2012.

———. 2010. Riverside County Specific Plans—Approved Documents and Land Use Maps Web page. Available: http://www.tlma.co.riverside.ca.us/planning/ content/splans/sp_docs_alpha.html. Accessed January 11, 2013.

———. 2012. Riverside County Land Information System. Available: http://www3.tlma.co.riverside.ca.us/pa/rclis/. Accessed December 14, 2012 and May 14, 2014.

Riverside County Transportation and Land Management Agency (TLMA)/GIS. 2008a. City of Menifee General Plan Land Use Map. Available: http://www.cityofmenifee.us/ DocumentView.aspx?DID=164. Accessed January 11, 2013.

———. 2008b. City of Menifee Zoning Map. Available: http://www.cityofmenifee.us/DocumentView.aspx?DID=163. Accessed on January 11, 2013.

Section 4.11
Mineral Resources

4.11 Mineral Resources

This section describes the mineral resources in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.11.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

The Proposed Project area is surrounded by the San Bernardino Basin to the north, San Jacinto Mountains to the east, the Anza Upland and the Agua Tibia Mountains to the south and southwest, respectively, and the Santa Ana Mountains to the west. The geology in the area consists primarily of alluvium, interspersed with low hills composed of igneous and metamorphic bedrock.

Historically, the Proposed Project area was known as the Pinacote mineral district. Historic inactive mine sites within 10 miles of Segment 1 of the Proposed Project include Leon Mine, located 1 mile to the west, and Good Hope Mine, located approximately 8 miles to the northwest. Leon Mine was a gold mine with a trace of silver. The Good Hope Mine was the principal gold mine in the district. In 1850, the Good Hope Mine was placer-mined and later worked with tunnels to a depth of 575 feet below ground surface. Gold ore occurred in quartz veins within a fine-grained granodiorite. Riverside County Gravel Pit, a historic surface mine of crushed and broken stone, was located approximately 0.25 of a mile west of Segment 1 of the Proposed Project along Keller Road.

The closest active mines to Segment 1 of the Proposed Project are the Robert F. Ford Trucking sand, dirt, and gravel mine, located approximately 10 miles to the west, and the San Jacinto Aggregates Inc. mine, located approximately 19 miles to the east, which extracts sand and gravel. Romoland sand and gravel mine, operated by Asphalt & Concrete Recycling, Inc., is located approximately 1.8 miles west of Valley 500/115 kV Substation and is currently idle. Approximately 6 miles east of Segment 2 of the Proposed Project is East Benton Pit, operated by Riverside County Department of Transportation; an open pit mine which extracts sand and gravel (CDC, 2012). Temecula Sand Company Pit, a producer of sand and gravel, is located approximately 2 miles southwest of Segment 2 of the Proposed Project. There are no active mines within 1 mile of the Proposed Project.

Minerals of commercial value are actively mined in the surrounding areas (with the closest active mine located 6 miles east of Segment 2 of the Proposed Project). Materials mined include gemstones (one mine), sand and gravel (22 mines), crushed stone (four mines), dimension stone (one mine), and clay and shale (one mine).

4.11.1.1 Oil and Gas Fields

The Proposed Project area is located on the Perris Block between the Elsinore and San Jacinto faults. Riverside County has no active oil or gas producing wells (DOGGR, 2014); however, there are four plugged and abandoned "dry hole" wells located south of Murrieta Hot Springs Road that are approximately 3.5 to 4 miles west-southwest of Segment 2 of the Proposed Project. The Geothermal Map for District 1, available online at the Department of Conservation/Division of Oil, Gas, and Geothermal Resources (DOGGR) website, shows that Murrieta Hot Springs is located approximately 2 miles west of Segment 2 of the Proposed Project and 3 miles southwest of Segment 1 of the Proposed Project. No other geothermal activities are present within 20 miles of the Proposed Project.

4.11.1.2 Resource Classification

The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act (SMARA) Regulations of 1975, which provide the land designations in areas containing significant aggregate resources. Mineral Resource Zones (MRZ) have been designated to indicate the significance of mineral deposits. MRZ classifications are applied based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data. These designations are also based on socioeconomic factors, such as market conditions and urban development patterns (CGS, 2001). The MRZ categories are as follows:

- MRZ-1: Areas where the available geologic information indicates no significant likelihood of significant mineral deposits
- MRZ-2a: Areas where the available geologic information indicates that there are significant mineral deposits
- MRZ-2b: Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits

- MRZ-3a: Areas where the available geologic information indicates that mineral deposits exist; however, the significance of the deposit is undetermined
- MRZ-3b: Areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined
- MRZ-4: Areas where there is not enough information available to determine the presence or absence of mineral deposits

According to the California State Mineral and Geology Board (SMGB), the majority of Segment 1 of the Proposed Project is classified as MRZ-4 (CGS, 2001) and Segment 2 of the Proposed Project is classified as MRZ-3a (MGP, 2011). The primary commercial mineral resources surrounding the Proposed Project area are sand, gravel, dimension stone, and gemstone deposits.

4.11.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.11.2.1 Federal

Mining and Minerals Policy Act of 1970

The Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21 et seq.) is an amendment to the Mineral Leasing Act. This statute encompasses both hard rock mining and oil and gas and established modern federal policy regarding mineral resources in the United States. The act articulates a national interest to foster and encourage private enterprise while mitigating adverse environmental impacts.

The act also directs the Secretary of the Interior to follow a policy that encourages the private mining sector in four ways: to develop a financially viable and stable domestic mining sector, to develop domestic mineral sources in an orderly manner, to conduct research to further "wise and efficient use" of these minerals, and to develop methods of mineral extraction and processing that would be as environmentally benign as possible.

4.11.2.2 State

California Surface Mining and Reclamation Act of 1975

The California Legislature enacted SMARA to limit new development in areas containing significant mineral deposits. SMARA also allows the SMGB, after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance. The classification system is intended to ensure that through appropriate lead agency policies and procedures, mineral deposits of statewide or regional significance are considered in agency decisions (CDC, 2007).

Pursuant to SMARA and its subsequent revisions, aggregate resources have been identified and mapped; areas designated MRZ-2 contains significant deposits and warrant particular protection to ensure a long-term supply of construction material (CDC, 2007).

4.11.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

Riverside County General Plan was adopted in December 2008 (Riverside County, 2008). The Multipurpose Open Space Element and Land Use Element does not contain any specific mineral resource goals or policies relevant to electric utility projects.

City of Menifee General Plan

The City of Menifee General Plan was adopted on December 20, 2013 (City of Menifee, 2013). The Open Space and Conservation Element does not contain any specific mineral resource goals or policies.

City of Murrieta General Plan

The City of Murrieta General Plan 2035 was adopted on July 19, 2011 (City of Murrieta, 2011). The Conservation Element does not contain any specific mineral resource goals or policies relevant to electric utility projects.

City of Temecula General Plan

The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2005). The Open Space/Conservation Element does not contain any specific mineral resource goals or policies relevant to electric utility projects.

City of Perris General Plan

The City of Perris General Plan Conservation Element (approved on July 12, 2005) does not contain any specific mineral resource goals or policies relevant to electric utility projects (City of Perris, 2005).

4.11.3 Significance Criteria

The significance criteria for assessing the impacts to mineral resources come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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 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

4.11.4 Impact Analysis

4.11.4.1 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

No Impact. The majority of Segment 1 of the Proposed Project is located within the SMGB MRZ-4 classification zone. This designation is assigned to areas where insufficient information is available regarding the presence or absence of mineral deposits. Segment 2 of the Proposed Project is within the SMGB MRZ-3a classification zone (CDC, 1991). This designation is assigned to areas where there is the potential for unknown mineral resources (MGP, 2011). However, potential impacts associated with temporary construction activities for the Proposed Project would affect a very small area in a narrow strip along the Proposed Project. No active mining locations are in the vicinity of the Proposed Project, and no mining of metallic or non-metallic deposits are within 1,000 feet on either side of the Proposed Project. Construction activities associated with the Proposed Project would not result in the loss of known mineral resources. Therefore, no impact would occur.

Operation

No Impact. Operations and Maintenance (O&M) of the Proposed Project would include routine inspection and maintenance of the Proposed 115 kV subtransmission line. No active mining locations are in the vicinity of the Proposed Project, and no mining of metallic or non-metallic deposits are within 1,000 feet on either side of the Proposed Project. Therefore, O&M of the Proposed Project would not result in the loss of known mineral resources. No impact would occur.

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

Construction

No Impact. The majority of Segment 1 of the Proposed Project is located within the SMGB MRZ-4 designation. This designation is assigned to areas where insufficient information is available regarding the presence or absence of mineral deposits. Segment 2 of the Proposed Project is located within the SMGB MRZ-3a classification zone (CDC, 1991). This designation is assigned to areas where there is the potential for unknown mineral resources (MGP, 2011). No locally important mineral resource recovery sites are delineated in any local general plan, specific plan, or other land use plan governing the Proposed Project area. Potential impacts associated with temporary construction activities for the Proposed Project would include very limited areas along the Proposed Project. No impact would occur.

Operation

No Impact. The majority of Segment 1 of the Proposed Project is located within the SMGB MRZ-4 designation. This designation is assigned to areas where insufficient information is available regarding the presence or absence of mineral deposits. Segment 2 of the Proposed Project is located within the SMGB MRZ-3a classification zone. This designation is assigned to areas where there is the potential for unknown mineral resources. No locally important mineral resource recovery sites are delineated in a local general plan, specific plan, or other land plan governing the Proposed Project area. No impact would occur.

4.11.5 Applicant Proposed Measures

Because no impacts to mineral resources would occur as a result of the Proposed Project, no avoidance and minimization measures are proposed.

4.11.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

From the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation, Segment 1 of the Alternative Project would be located within the SMGB MRZ-4 classification zone. As noted above, this designation is assigned to areas where insufficient information is available regarding the presence or absence of mineral deposits. Similar to Segment 1 of the Proposed Project, potential impacts associated with temporary construction activities for Segment 1 of the Alternative Project would affect a very small area in a narrow strip along Segment 1 of the Alternative Project. No active mining locations are in Segment 1 of the Alternative Project vicinity, and no mining of metallic or non-metallic deposits are within 1,000 feet on either side of Segment 1 of the Alternative Project. In addition, similar to Segment 1 of the Proposed Project, there are no locally important mineral resource recovery sites delineated in a local general plan, specific plan, or other land plan for the area around Segment 1 of the Alternative Project. Therefore, construction and O&M of Segment 1 of the Alternative Project would not result in the loss of known mineral resources or the loss of availability of a locally important mineral resource recovery site. Similar to Segment 1 of the Proposed Project, no impact would occur.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of

Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

Segment 2 of the Alternative Project would be located within the SMGB MRZ-3a classification zone. As noted above, this designation is assigned to areas where there is the potential for unknown mineral resources. Similar to Segment 2 of the Proposed Project, potential impacts associated with temporary construction activities for the Segment 2 of the Alternative Project would affect a very small area in a narrow strip along Segment 2 of the Alternative Project. No active mining locations are in Segment 2 of the Alternative Project vicinity, and no mining of metallic or non-metallic deposits are within 1,000 feet on either side of Segment 2 of the Alternative Project. In addition, similar to Segment 2 of the Proposed Project, there are no locally important mineral resource recovery sites delineated in a local general plan, specific plan, or other land plan for the area around Segment 2 of the Alternative Project. Therefore, construction and O&M of Segment 2 of the Alternative Project would not result in the loss of known mineral resources or the loss of availability of a locally important mineral resource recovery site. Similar to Segment 2 of the Proposed Project, no impact would occur.

4.11.7 References

California Department of Conservation (CDC). 1991. Mineral Land Classification of the Temescal Valley Area, Riverside County, California, Special Report 165, California. Division of Mines and Geology.

_____. 2007. Surface Mining and Reclamation Act (SMARA) and Associated Regulations. Office of Mine Reclamations. Available: www.conservation.ca.gov/omr/lawsandregulations/Pages/SMARA.aspx. Accessed December 2012.

_____. 2012. Office of Mine Reclamation – Mines Online (MOL) Mines List Search. Available: http://maps.conservation.ca.gov/mol/mol-app.html Accessed April 2014

California Division of Oil, Gas, and Geothermal Resources (DOGGR). 2014. Regional Wildcat Map W1-7. Available: www.conservation.ca.gov/DOG/Pages/Index.aspx. Accessed April 2014.

California Geological Survey (CGS). 2001. Appendix C: SMARA Mineral Land Classification Project Dealing with Mineral Resources in California.

California Public Utilities Commission (CPUC). 1995. General Order Index. Available: http://docs.cpuc.ca.gov/PUBLISHED/Graphics/589.PDF. Accessed April 2014.

City of Menifee. 2013. City of Menifee General Plan. Available: http://cityofmenifee.us/index.aspx?NID=221. Accessed August 2014.

City of Murrieta. 2011. General Plan 2035. Available: http://www.murrieta.org/cityhall/cd/planning/docs/general.asp Accessed August 2014.

City of Perris. 2006. General Plan. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed August 2014.

City of Temecula. 2005. General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed August 2014.

Mining and Minerals Policy Act of 1970. 1970. United States Code. Available: http://en.openei.org/wiki/Mining_and_Minerals_Policy_Act_of_1970. Accessed April 2014.

Murrieta General Plan (MGP). 2011. General Plan Update, Section 5.12 Mineral Resources Available: www.murrieta.org/civica/filebank/blobdload.asp?BlobID=5209. Accessed May 2014

Riverside County. 2008. *General Plan–2008 Update, Multipurpose Open Space Element*. Available at:

http://planning.rctlma.org/Portals/0/genplan/general_plan_2013/1%20General%20Plan/Chapter%205-Multipurpose%20Open%20Space%20Adopted-Final%20Clean.pdf. Accessed August 2014.

United States Geological Survey (USGS). 2014. Mineral Resources Data System (MRDS). Available: http://tin.er.usgs.gov/mrds/. Accessed April 2014.

Section 4.12
Noise

4.12 Noise

This section describes noise in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.12.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

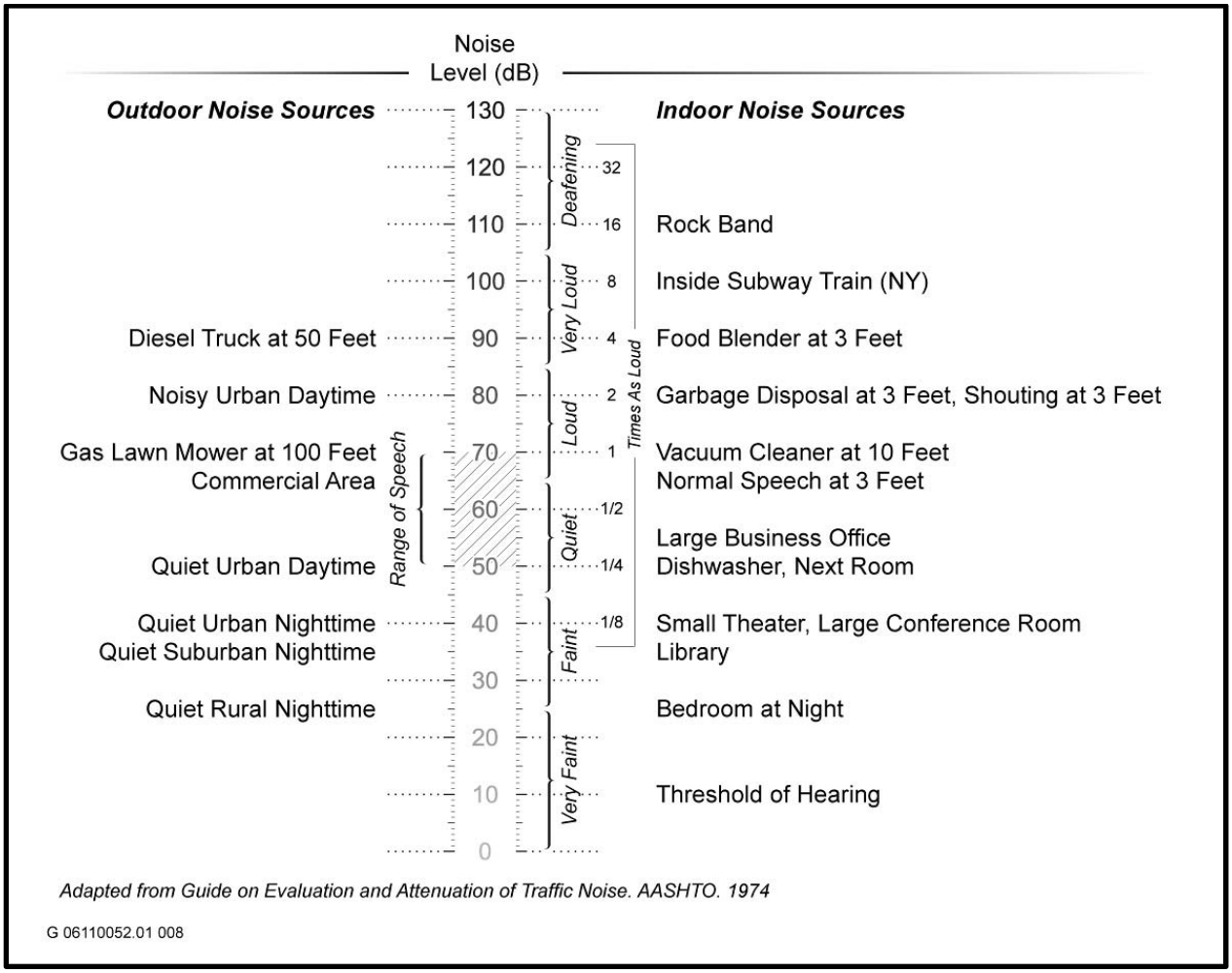
Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.12.1.1 Sound Levels and Human Response/Sensitivity

Noise is defined as unwanted or objectionable sound. Sound is usually considered unwanted when it interferes with normal activities, when it causes physical harm, and when it has adverse health effects. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment.

Noise levels are measured in decibels (dB). The higher the decibel level, the louder the noise. Sound levels above 80 dB are considered potentially hazardous. The level and duration of noise generally will determine the level of effect or impact on a given receiver. Within the usual range of environmental sound levels, perception of loudness is relatively predictable and can be approximated by frequency filtering using the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise.

Figure 4.12-1 Typical Noise Levels



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For this reason, the A-weighted sound level has become the standard descriptor for environmental noise assessment. All sound levels discussed in this section are A-weighted. Figure 4.12-1 Typical Noise Levels presents average sound levels for typical sound sources.

With respect to how humans perceive and react to changes in community noise levels, a 1 dBA increase is generally imperceptible, a 3 dBA increase is usually barely perceptible, a 6 dBA increase is typically clearly noticeable, and a 10 dBA increase is subjectively perceived as approximately twice as loud, as presented in Table 4.12-1 Subjective Reaction to Changes in Noise Levels of Similar Sources (Caltrans, 2009). Table 4.12-1 Subjective Reaction to Changes in Noise Levels of Similar Sources was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broad-band noise sources. It is most applicable to noise levels in the range of 50 to 70 dBA, as this is within the usual range of community noise levels.

4.12.1.2 Sound Propagation and Attenuation

As sound (noise) travels from the source to the receptor, the attenuation, or manner of noise reduction in relation to the sound propagation path, is dependent on distance, surface characteristics, atmospheric conditions, and the presence of physical barriers. The inverse-square law describes the attenuation caused by the pattern in which sound travels from the source to receptor. Sound travels uniformly outward from a point source in a spherical pattern with an attenuation rate of 6 dBA (for acoustically hard sites) to 7.5 dBA (for acoustically soft sites) per doubling of distance. However, from a line source (e.g., continuous roadway traffic), sound travels uniformly outward in a cylindrical pattern with an attenuation rate of 3 dBA (for acoustically hard sites) to 4.5 dBA (for acoustically soft sites) per doubling of distance. Atmospheric conditions, such as wind speed, temperature (inversion), and humidity also may affect sound propagation and resulting sound levels at a given receptor. The presence of a barrier between the source and the receptor also may attenuate noise levels. The actual amount of attenuation is dependent upon the size of the barrier and the frequency of the noise. A noise barrier may be any natural or human-made feature, such as a hill, building, wall, or berm (Caltrans, 2009).

Table 4.12-1 Subjective Reaction to Changes in Noise Levels of Similar Sources

Change in Noise Level, dBA	Subjective Reaction	Factor Change in Acoustical Energy
1	Imperceptible (Except for Tones)	1.3
3	Just Barely Perceptible	2.0
6	Clearly Noticeable	4.0
10	About Twice (or Half) as Loud	10.0

Source: Egan, 1988

4.12.1.3 Noise Level Descriptors

The appropriate noise descriptor for a given noise source depends on its spatial and temporal distribution, duration, and amplitude. The following noise descriptors are most often used to characterize typical environmental sources (e.g., traffic, construction, industry) (Caltrans, 2009; Lipscomb and Taylor, 1978):

- L_{max} *(maximum noise level)* is the maximum instantaneous A-weighted noise level during a specific period of time
- L_{min} *(minimum noise level)* is the minimum instantaneous A-weighted noise level during a specific period of time
- L_n *(statistical descriptor)*is the noise level exceeded "n" percent of a specific period of time, i.e.:
  - L_5 is the fast A-weighted sound pressure level exceeded 5 percent of the time in a defined time interval (3 minutes every hour)
  - L_{50} is the fast A-weighted sound pressure level exceeded 50 percent of the time in a defined time interval (30 minutes every hour)
  - L_{95} is the fast A-weighted sound pressure level exceeded 95 percent of the time in a defined time interval (57 minutes every hour)
- L_{eq} *(equivalent noise energy level)* is the energy mean (average) A-weighted noise level. The L_{eq} represents a steady-state sound level that contains the same total energy as a time-varying signal over a given time period (usually 1 hour). The L_{eq} is the foundation of the composite noise descriptors defined above, such as L_{dn} and CNEL, and shows a positive correlation with community response to noise
- L_{dn} *(day-night average noise level)* is the 24-hour L_{eq} with a 10-dB "penalty" for noise events that occur during the noise-sensitive nighttime hours between 10 p.m. and 7 a.m. In other words, 10 dB are "added" to noise events that occur in the nighttime hours. For instance, a diesel truck passing by between 10 p.m. and 7 a.m. at 75 dB at 50 feet would have 10 dB added to the noise level, resulting in an 85-dB level being input into the overall L_{dn} calculation. As a result, a higher noise level is reported when compliance with noise standards is determined. The L_{dn} attempts to account for the fact that noise during this specific period of time may result in disturbance during normal sleeping hours
- *CNEL (community noise equivalent level)* is a noise level similar to the L_{dn} described above, but with a 5-dB "penalty" also added to noise events that occur during the noise-sensitive evening hours between 7 p.m. and 10 p.m.

4.12.1.4 Ground-borne Vibration and Noise

Ground-borne vibration (GBV) is the periodic oscillation of a medium or object. Typical sources of perceptible GBV during construction include operation of heavy earth-moving equipment, blasting, and pile driving. If a roadway is smooth, the GBV is rarely perceptible. The rumbling sound caused by the vibration of room surfaces is called ground-borne noise (GBN). Vibration amplitude is typically expressed in terms of peak particle velocity (PPV) or root mean square (RMS) particle velocity. The PPV and RMS velocity are normally described in micro inch per second (micro in/sec). PPV is defined as the maximum instantaneous positive or negative peak

of a vibration signal. PPV is the metric often used to describe blasting vibration and other vibration sources that result in structural stresses in buildings.

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. Consequently, vibration is often expressed in decibel notation as vibration velocity level (L_v, VdB), which is related to the RMS velocity amplitude.

The background vibration-velocity level typical of residential areas is approximately 50 VdB. GBV is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA, 2006). Table 4.12-2 Human Response to Different Levels of Ground-borne Vibration and Noise summarizes the general human response to different levels of GBV and GBN.

Table 4.12-2 Human Response to Different Levels of Ground-borne Vibration and Noise

Vibration-Velocity Level (VdB)	Noise Level (dBA)	Human Reaction
65	40	Approximate threshold of perception.
75	50	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85	60	Vibration acceptable only if there is an infrequent number of events per day.

Note:
VdB = velocity decibels referenced to 1 micro inch per second and based on the root mean square vibration velocity
Source: FTA, 2006

4.12.1.5 Construction Noise

Construction noise generated by off-road equipment is dependent on the type of equipment, the specific model, the type of activity, and the condition of the equipment. The dominant source of noise from most construction equipment is the engine, usually diesel. In addition, construction equipment operation is categorized as stationary or mobile. Stationary equipment operates in one location for one or more days at a time, with either a fixed power operation (pumps, generators, compressors) or a variable noise operation (pile drivers, pavement breakers). Mobile equipment moves around the construction site with power applied in a cyclic fashion (bulldozers, loaders), or to and from the site (trucks). Variation in power imposes additional complexity in characterizing the noise source level from a piece of equipment. This is handled by describing

the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FTA, 2006).

Construction activities are characterized by variations in the power expended by equipment, with resulting variation in noise levels with time. Variation in the power is expressed in terms of a "usage factor" of the equipment, which is the percentage of time during the workday that the equipment is operating at full power. Time-varying noise levels are converted to a single number (L_{eq}) for each piece of equipment during the operation. Besides having daily variations in activities, major construction projects are completed in several different phases. Each phase has a specific equipment mix, depending on the work to be completed during that phase (FTA, 2006).

4.12.1.6 Corona Noise

When a transmission or subtransmission line is in operation, an electric field is generated in the air surrounding the conductors, forming a "corona." A corona results from the partial breakdown of the electrical insulating properties of the air surrounding the conductors. When the intensity of the electric field at the surface of the conductor exceeds the insulating strength of the surrounding air, a corona discharge occurs at the conductor surface, representing a small dissipation of heat and energy. Some of the energy may dissipate in the form of small local pressure changes that result in audible noise or in radio or television interference. Audible noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a 120-Hertz (Hz) hum.

Slight irregularities or water droplets on the conductor and/or insulator surface accentuate the electric field strength near the conductor surface, thereby making corona discharge and the associated audible noise more likely. Under weather conditions such as rain and high wind, ambient noise levels would generally be higher than those generated by the subtransmission or transmission line operation, and would mask the corona noise levels. Therefore, audible noise from subtransmission or transmission lines is generally a wet weather (wet conductor) phenomenon. However, during dry weather, insects and dust on the conductors can also serve as sources of corona discharge, making the associated audible noise more likely.

4.12.1.7 Existing Noise Sources and Sensitive Receptors

The noise environment in the Proposed Project area is typical of a rural setting, except at locations more directly affected by transportation, recreation, and commercial noise sources. Motor vehicles traveling on Interstate 215, State Route (SR) 74 and SR-79, and several other arterial roadways contribute to transportation related noise along with occasional aircraft overflights. Intermittent noise from outdoor activities at the surrounding residences (e.g., people talking, operation of landscaping equipment, car doors slamming, and dogs barking), although minor, also influences the ambient noise environment.

Short-term (15-minute) ambient noise level measurements were taken by AECOM on the afternoon of November 1, 2012 at five locations along Segment 1 of the Proposed Project, and on the afternoon of April 24, 2014 at four locations along Segment 2 of the Proposed Project to characterize the existing (ambient) noise environment. The monitored 15-minute L_{eq} and L_{max}

noise levels can be considered representative of the hourly L_{eq} and L_{max} at the monitor locations. All measurements were taken using a Larson Davis Laboratories (LDL) Model 824 precision integrating sound level meter, which meets American National Standards Institute (ANSI) standards for Class 1 sound level meters (ANSI S1.4). The meter was calibrated before measurements were taken, using an LDL Model CA200 acoustical calibrator. The L_{eq} and L_{max} noise levels were monitored at the locations shown in Figure 4.12-2 Ambient Noise Monitoring Locations. The results of these measurements are summarized in Table 4.12-3 Summary of Ambient Noise Measurements (Proposed Project). Additional ambient noise measurements, taken for the Alternative Project, are discussed in Section 4.12.6, Alternative 2, and shown in Table 4.12.13 Summary of Ambient Noise Measurements (Alternative Project).

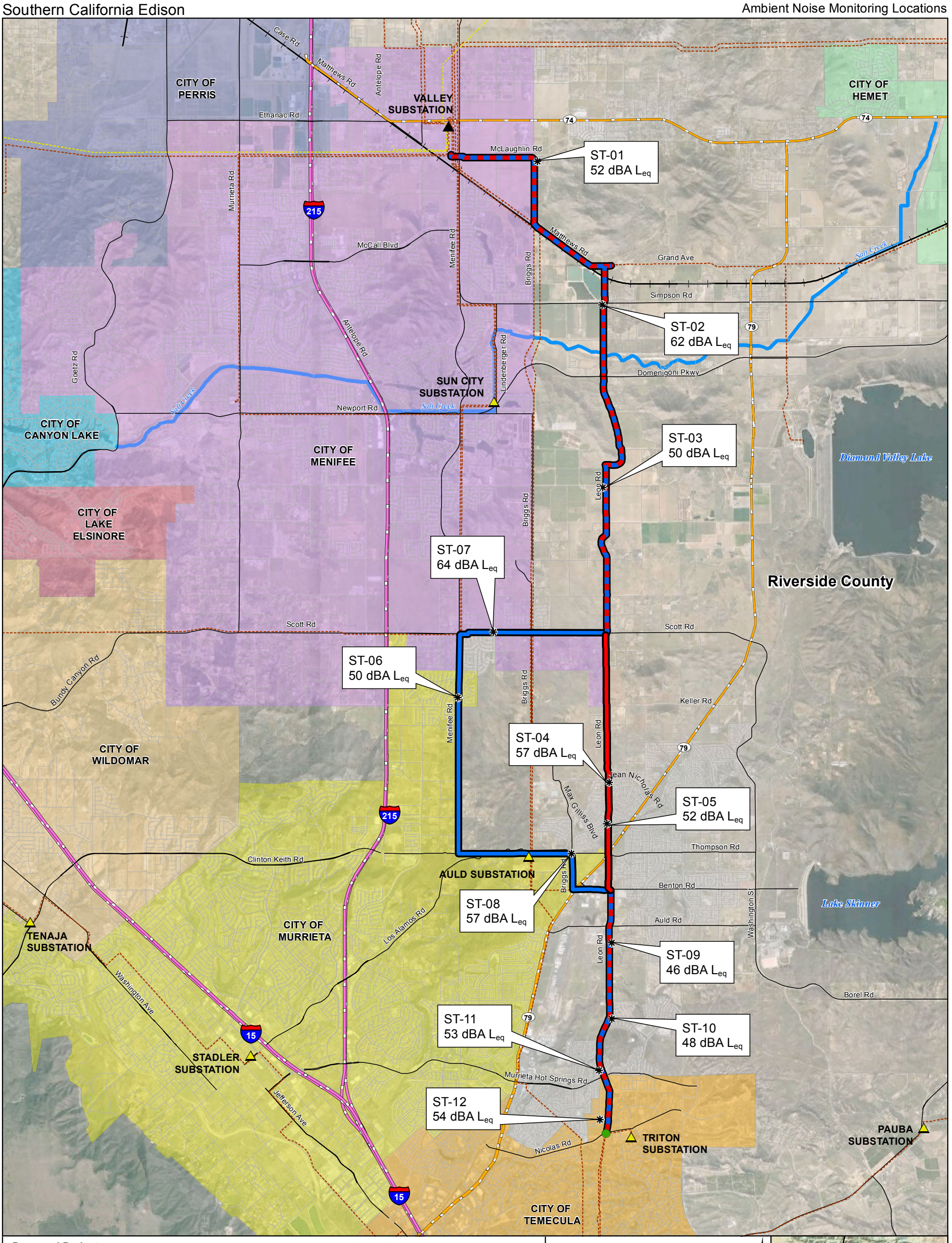
As presented in Table 4.12-3 Summary of Ambient Noise Measurements (Proposed Project), average daytime noise levels ranged from 46 to 64 dBA L_{eq}, with maximum levels ranging from 62 to 85 dBA L_{max} attributable to vehicle traffic and local garbage collection.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.12-2

Southern California Edison

Ambient Noise Monitoring Locations



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

Noise Monitoring
- Measurement Sites

Sources: SCE, 2014; Riverside County, 2014; Aerial Image: Google Earth Pro, 2014

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Table 4.12-3 Summary of Ambient Noise Measurements (Proposed Project)

Site	Residential[1]	Date and Time	Noise Source	Sound Level (dBA)	
				L_{eq}	L_{max}
ST-01	About 30 feet to the west of 30061 Mount Menifee Street, Romoland, CA 92585 (an unincorporated area in the County)	11/1/2012 13:44 to 13:58	Distant Traffic	52	64
ST-02	About 150 feet southwest of the corner of Leon Road and Simpson Road, east of 28550 Leon Road, Winchester, CA 92596	11/1/2012 14:11 to 14:25	Vehicle Noise	62	71
ST-03	About 50 feet southwest of the corner of Leon Road and Holland Road, east of 30901 Holland Road, Winchester, CA 92596	11/1/2012 14:44 to 14:58	Vehicle Noise	50	62
ST-04	About 200 feet southeast of the corner of Leon Road and Jean-Nicholas Road, west of 35077 Bola Court, Winchester, CA 92596	11/1/2012 15:13 to 15:27	Vehicle Noise	57	64
ST-05	About 50 feet north of 35580 Hawkeye Street, Murrieta, CA 92563, on the sidewalk at the end of Hawkeye Street (cul-de-sac)	11/1/2012 15:41 to 15:55	Vehicle Noise	52	63
ST-09	About 60 feet east and 5 feet north of intersection of Leon Road and Van Gaale Road along existing subtransmission line in Riverside County	4/24/2014 16:03 to 16:18	Vehicle Noise	46	80
ST-10	About 30 feet north of end of cul-de-sac of Promontory Parkway at existing subtransmission line in Riverside County	4/24/2014 16:42 to 16:57	Vehicle Noise	48	82
ST-11	About 425 feet north of Murrieta Hot Springs Road and 75 feet south of Bow Bridge Drive along existing subtransmission line in Riverside County	4/24/2014 17:07 to 17:22	Vehicle Noise	53	85
ST-12	About 450 feet west of existing subtransmission line at intersection of Jon's Place and Diego Drive in City of Temecula	4/24/2014 17:31 to 17:46	Vehicle Noise	54	79

Notes:

Acronyms: dBA = A-weighted decibels; L_{eq} = average noise level over a given period; L_{max} = highest measured noise level

[1] Receptors located in closest proximity to proposed construction activities include private residences. Therefore, baseline noise measurements were taken within proximity to residential receptors located within 50 feet of the Proposed 115 kV subtransmission line.

Source: Data compiled by AECOM in 2013 and 2014.

Noise sensitive receptors include residences, schools, hospitals, parks, and similar areas where peace and quiet generally would be expected. The closest noise sensitive receptors to the Proposed Project are within 50 feet of the Proposed 115 kV subtransmission line, on Leon Road, Bow Bridge Drive, and Promontory Parkway in unincorporated Riverside County (see Table 4.12-3 Summary of Ambient Noise Measurements (Proposed Project) and Figure 4.12-2 Ambient Noise Monitoring Locations).

4.12.2 Regulatory Setting

Federal, state, and local regulations were reviewed to evaluate potential noise impacts from the Proposed Project.

4.12.2.1 Federal

The United States Environmental Protection Agency (USEPA), Office of Noise Abatement and Control, was established to coordinate federal noise control activities. After its inception, USEPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, which established programs and guidelines to identify and address the effects of noise on public health and welfare and the environment. In 1982, the USEPA transferred responsibilities for regulating noise control policies from the federal government to state and local governments. Noise control guidelines and regulations contained in rulings by the USEPA in prior years remain valid, but more individualized control for specific issues is allowed by designated state and local government agencies.

4.12.2.2 State

Ground-borne Vibration and Noise Impact Criteria

The California Environmental Quality Act (CEQA) states that exposure of persons to or generation of excessive vibration (i.e., GBV and GBN levels) must be analyzed; however, CEQA does not define the term "excessive" with respect to vibration GBV and GBN. Numerous public and private organizations and governing bodies have provided guidelines to assist in the analysis of ground-borne noise and vibration; however, federal, state, and local governments have yet to establish specific, quantifiable, ground-borne noise and vibration standards. Additionally, there are no federal, state, or local vibration regulations or guidelines directly applicable to the Proposed Project.

The Federal Transit Administration (FTA) and the California Department of Transportation (Caltrans) have developed vibration guidelines relating to transportation and construction sources. The Proposed Project is not subject to FTA or Caltrans regulations; however, these guidelines serve as a useful tool to evaluate vibration impacts. Therefore, FTA and Caltrans guidance was used to establish significance criteria for assessing the GBV and GBN impacts of the Proposed Project, as presented in Section 4.12.4, Significance Criteria. Caltrans guidelines

recommend that a standard of 0.2 micro in/sec PPV not be exceeded for the protection of normal residential buildings, and that 0.08 micro in/sec PPV not be exceeded for the protection of fragile or historically significant structures (Caltrans, 2004). With respect to human response within residential uses (e.g., annoyance, sleep disruption), the FTA recommends a maximum acceptable GBV and GBN standard of 80 VdB and 43 dBA, respectively (FTA, 2006).

Construction Noise Impact Criteria

CEQA states that the potential for excessive construction noise must be analyzed. The FTA provides guidelines for reasonable criteria for assessment of construction noise (FTA 2006), which indicate that construction noise that exceeds a 1-hour L_{eq} of 90 dBA or an 8-hour L_{eq} of 80 dBA during the day would provoke adverse community reaction. These criteria are based on noise generated within 50 feet of a residence.

4.12.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan, Noise Element

The Noise Element of the Riverside County General Plan contains specific goals and policies for evaluating a project's compatibility with surrounding land uses (Riverside County, 2008). The following goals and policies related to noise are relevant to the Proposed Project:

- Policy N 4.1: Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:
  - 45 dB-10-minute L_{eq} between 10:00 p.m. and 7:00 a.m. (nighttime)
  - 65 dB-10-minute L_{eq} between 7:00 a.m. and 10:00 p.m. (daytime)
- Policy N 4.2: Develop measures to control non-transportation noise impacts
- Policy N 4.3: Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed, and ensure that the recommended mitigation measures are implemented
- Policy N 12.1: Minimize the impacts of construction noise on adjacent uses within acceptable practices

- Policy N 12.2: Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas
- Policy N 12.4: Require that all construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer

Riverside County Municipal Code, Noise Ordinance

Riverside County regulates noise in accordance with Chapter 9.52, Noise Regulations of the Riverside County Municipal Code (2006). The Riverside County Municipal Code defines a sensitive receptor as a land use that is sensitive to noise including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries (Section 9.52.030).

The Municipal Code states that maximum noise levels from stationary noise sources at the property line of a sensitive receptor (medium density residential and low density residential in the Proposed Project area) are to remain below 45 dB during nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dB during daytime hours (7:00 a.m. to 10:00 p.m.) (Section 9.52.040).

It also states that sound emanating from private construction projects located within one-quarter mile from an inhabited dwelling is exempt from the provisions of Chapter 9.52, if construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May (Section 9.52.020[I]).

In addition, the Municipal Code states that no person is to operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m., such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person is to operate any power tools or equipment at any other time, such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment (Section 9.52.060[B]).

City of Murrieta Municipal Code, Noise Ordinance

Construction Noise

Section 16.30.130 of the City of Murrieta Development Code (2012) regulates construction noise exposure. The Noise Ordinance prohibits noise generated by construction activities between the hours of 7:00 p.m. and 7:00 a.m. (Monday through Saturday) and on Sundays and holidays if the sound creates a noise disturbance across a residential or commercial property line, except for emergency work of public service utilities. Construction activities are to be conducted in a manner that the maximum noise levels (L_{max}) at the affected structures do not exceed those listed in Table 4.12-4 City of Murrieta Construction Noise Standards (L_{max}).

Table 4.12-4 City of Murrieta Construction Noise Standards (L_{max})

Equipment Type	Single-Family Residential	Multi-Family Residential	Commercial
Mobile Equipment			
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	75 dBA	80 dBA	85 dBA
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	60 dBA	64 dBA	70 dBA
Stationary Equipment			
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	60 dBA	65 dBA	70 dBA
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	50 dBA	55 dBA	60 dBA
Source: City of Murrieta Development Code, implemented in 2012			

Operational Noise

Within the City of Murrieta, the Noise Ordinance governs operational noise generated between two properties and does not regulate noise from transportation sources, such as traffic, aircraft, and railways. Section 16.30.090 of the Noise Ordinance establishes the exterior noise standards for all receptor properties within a designated noise zone. The City's exterior noise level limits between properties are summarized in Table 4.12-5 City of Murrieta Exterior and Interior Noise Limits.

Section 16.30.090(B) of the Development Code further restricts noise levels. Section 16.30.090(B) states, in part:

> No person shall operate or cause to be operated any source of sound at any location within the city or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by a person that causes the noise level, when measured on any other property, to exceed the following exterior noise standards:

Table 4.12-5 City of Murrieta Exterior and Interior Noise Limits

Noise Zone	Land Use (Receptor Property)	Time Period	Allowed Exterior Noise Level (dBA)
Exterior Noise Limits			
I	Noise-sensitive area	Anytime	45
II	Residential properties	10:00 p.m. to 7:00 a.m.	45
		7:00 a.m. to 10:00 p.m.	50
	Residential properties within 500 feet of a kennel(s)	7:00 a.m. to 10:00 p.m.	70
III	Commercial properties	10:00 p.m. to 7:00 a.m.	55
		7:00 a.m. to 10:00 p.m.	60
IV	Industrial properties	Anytime	70
Interior Noise Limits			
All Noise Zones	Multi-family residential	10:00 p.m. to 7:00 a.m.	40
		7:00 a.m. to 10:00 p.m.	45
Source: City of Murrieta Development Code, implemented in 2012			

Section 16.30.090(B) of the Development Code further restricts noise levels. Section 16.30.090(B) states, in part:

> No person shall operate or cause to be operated any source of sound at any location within the city or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by a person that causes the noise level, when measured on any other property, to exceed the following exterior noise standards:
>
> 1. Standard No. 1 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 may be the applicable noise level from Table 4.12-5 above (e.g., 50 dBA at residential properties during daytime hours). This level is represented by the L_{50} noise level descriptor
> 2. Standard No. 2 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Table 4.12-5 above, plus 5 dB (e.g., 55 dBA L_{25} at residential properties during daytime hours)

3. Standard No. 3 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than 5 minutes in any hour. Standard No. 3 shall be the applicable noise level from Table 4.12-5 above plus 10 dB (e.g., 60 dBA L_8 at residential properties during daytime hours)
4. Standard No. 4 shall be the exterior noise level which shall not be exceeded for a cumulative period of more than 1 minute in any hour. Standard No. 4 shall be the applicable noise level from Table 4.12-5 above plus 15 dB (e.g., 65A dB L_2 at residential properties during daytime hours)
5. Standard No. 5 shall be the exterior noise level which shall not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Table 4.12-5 above plus 20 dB (e.g., 70 dBA L_{max} at residential properties during daytime hours)

Section 16.30.100 sets forth interior noise level limits for multi-family residential properties, as stated in Table 4.12-5 City of Murrieta Exterior and Interior Noise Limits. Section 16.30.100 states, in part:

> No person shall operate or cause to be operated within a residential unit any source of sound, or allow the creation of any noise, that causes the noise level when measured inside a neighboring receiving residential unit to exceed the following standards:
>
> 1. Standard No. 1. The applicable interior noise level for cumulative period of more than 5 minutes in any hour (i.e., L_8 descriptor)
> 2. Standard No. 2. The applicable interior noise level plus 5 dB for a cumulative period of more than 1 minute in any hour (i.e., L_2 descriptor)
> 3. Standard No. 3. The applicable interior noise level plus 10 dB for any period of time (i.e., L_{max} descriptor)

City of Temecula General Plan, Noise Element

The Noise Element of the City of Temecula General Plan contains specific goals and policies for evaluating a project's compatibility with surrounding land uses (City of Temecula, 2005). To ensure that noise producers do not adversely affect sensitive receptors, the City uses land use compatibility standards when planning and making development decisions. Table N-1 of the Noise Element (Table 4.12-6 City of Temecula Land Use Noise Standards) summarizes City noise standards for each land use classification including noise sensitive. The standards represent the maximum acceptable exterior noise level, as measured at the property boundary, which is used to determine noise impacts.

Table 4.12-6 City of Temecula Land Use Noise Standards

Property Receiving Noise		Maximum Noise Level (L_{dn} or CNEL, dBA)	
Type of Use	**Land Use Designation**	**Interior**	**Exterior[3]**
Residential	Hillside Rural Very Low Low Medium	45	65
	Medium	45	65 / 70[1]
	High	45	70[1]
Commercial and Office	Neighborhood Community Highway Tourist Service	--	70
	Professional Office	50	70
Light Industrial	Industrial Park	55	75
Public/Institutional	Schools	50	65
	All others	50	70
Open Space	Vineyards/Agriculture	--	70
	Open Space	--	70 / 65[2]

Notes:

[1] Maximum exterior noise levels up to 70 dB dBA CNEL are allowed for Multiple-Family Housing.

[2] Where quiet is a basis required for the land use.

[3] Regarding aircraft-related noise, the maximum acceptable exposure for new residential development is 60 dB CNEL. City of Temecula, 2005.

The City's primary goal with regard to community noise is to minimize the exposure of residents to unhealthful or excessive noise levels to the extent possible. The Noise Element Table N-2 establishes noise/land use compatibility guidelines based on cumulative noise criteria for outdoor noise, as shown in Table 4.12-7 City of Temecula Land Use Compatibility Matrix.

Table 4.12-7 City of Temecula Land Use Compatibility Matrix

Land Use	Community Noise Exposure (L_{dn} or CNEL, dBA)						
	55	60	65	70	75	80	
Residential							
Transient Lodging – Motel, Hotel							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Parks							
Golf Course, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial, and Professional							
Industrial, Manufacturing, Utilities,							

Land Use	Community Noise Exposure (L_{dn} or CNEL, dBA)						
	55	60	65	70	75	80	
Industrial, Manufacturing, Utilities, Agriculture							

Notes:

1 Regarding aircraft-related noise, the maximum acceptable exposure for new residential development is 60dB CNEL.

2 No normally acceptable condition is defined for these uses. Noise studies are required prior to approval.

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.

Conditionally Acceptable: New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design

Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.

Clearly Unacceptable: New construction or development clearly should not be undertaken.

Source: City of Temecula.2005.

City of Temecula Municipal Code, Noise Ordinance

Construction Noise

The City of Temecula regulates construction noise in accordance with Section 9.20 Noise, of the City of Temecula Municipal Code, Section 9.20.040 (City of Temecula, 2007). No person shall engage in or conduct construction activity, when the construction site is within one-quarter mile of an occupied residence, between the hours of six-thirty p.m. and seven a.m., Monday through Friday, and shall only engage in or conduct construction activity between the hours of seven a.m. and six-thirty p.m. on Saturday. No construction activity shall be undertaken on Sunday and nationally recognized holidays unless exempted by Section 9.20.070 of the Temecula Municipal Code. Public works projects of any federal, state, or local entity or emergency work by public utilities are exempt from the provisions of this subsection. Residents working on their homes or property are exempt from the prohibition of construction activities on Sundays and holidays and shall only engage in or conduct construction activity between the hours of seven a.m. and six-thirty p.m. when working on Sundays and holidays. The city council may, by formal action, exempt projects from the provisions of this chapter.

Operational Noise

The City of Temecula regulates noise in accordance with Section 9.20 Noise, of the City of Temecula Municipal Code. Section 9.20.040 (Noise Ordinance) General Sound Level Standards states that:

> No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Tables N-1 and N-2

The noise ordinance establishes maximum exterior noise levels for residences at 65 dBA.

City of Menifee General Plan, Noise Element

Since the City of Menifee was incorporated in 2008, the City has been using the standards and policies included in the Riverside County General Plan Noise Element; however, in 2013 the City of Menifee adopted a General Plan, including a Noise Element (City of Menifee, 2013). The Noise Element contains policies for limiting noise generated from future projects as well as to abate existing noise problems. The following goals and policies of the Noise Element are relevant to the Proposed Project:

Goal N-1: Noise-Sensitive Land Uses

- Policy N-1.1: Assess the compatibility of proposed land uses with the noise environment when preparing, revising, or reviewing development project applications
- Policy N-1.6: Coordinate with the County of Riverside and adjacent jurisdictions to minimize noise impacts from adjacent land uses along the City's boundaries, especially at rural edges
- Policy N-1.7: Mitigate exterior and interior noise levels listed below to the extent feasible, for stationary sources adjacent to sensitive receptors:

Stationary Source Noise Standards

Land Use	Interior Standards	Exterior Standards
Residential		
10:00 p.m. to 7:00 a.m.	40 L_{eq} (10 minute)	45 L_{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L_{eq} (10 minute)	65 L_{eq} (10 minute)

- Policy N-1.9: Limit the development of new noise-producing uses adjacent to noise-sensitive receptors and require that new noise-producing land uses are designed with adequate noise abatement measures

City of Menifee Municipal Code, Noise Ordinance

Section 8.01.010, Hours of Construction of the City of Menifee Municipal Code (2010) states that any construction within the city limits located one-quarter mile from an occupied residence is permitted only Monday through Saturday, except on nationally recognized holidays, from

6:30 a.m. to 7:00 p.m. Construction on Sunday or nationally recognized holidays is not permitted unless prior approval is obtained from the City Building Official or City Engineer.

City of Perris General Plan, Noise Element

The City of Perris General Plan Noise Element (2005) does not contain goals or policies applicable to the Proposed Project.

City of Perris Municipal Code, Noise Ordinance

The following portions of the City of Perris Municipal Code (2000) are relevant to the Proposed Project.

Section 7.34.050 establishes the following general prohibitions:

> A. It is unlawful for any person to willfully make, cause or suffer, or permit to be made or caused, any loud excessive or offensive noises or sounds which unreasonably disturb the peace and quiet of any residential neighborhood or which are physically annoying to persons of ordinary sensitivity or which are so harsh, prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of the city, or any section thereof

The standards for dBA noise level in Section 7.34.040 are presented in Table 4.12-8 City of Perris Noise Level Standards below. To the extent that the noise created causes the noise level at the property line to exceed the ambient noise level by more than 1.0 decibel, it shall be presumed that the noise being created also is in violation of this section.

Table 4.12-8 City of Perris Noise Level Standards

Time Period	Maximum Noise Level (dBA)
7:01 AM – 10:00 PM	80
10:01 PM – 7:00 AM	60
Source: City of Perris, 2000	

> B. The characteristics and conditions which should be considered in determining whether violation of the provisions of this section exists should include, but not be limited to, the following:
>
> - The level of the noise
> - Whether the nature of the noise is usual or unusual
> - Whether the origin of the noise is natural or unnatural
> - The level of the ambient noise
> - The proximity of the noise to sleeping facilities

- The nature and zoning of the area from which the noise emanates and the area where it is received
- The time of day or night the noise occurs
- The duration of the noise
- Whether the noise is recurrent, intermittent or constant (Ord. 1082 Section 2 (part), 2000)

It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the city (City of Perris, 2000).

4.12.3 Significance Criteria

The significance criteria for assessing the impacts from noise are determined from the CEQA Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would cause:

- Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- Exposure of people residing or working in the project area to excessive noise levels for a project located within an airport land-use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport
- Exposure of people residing or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip

4.12.4 Impact Analysis

Methodology

The methodology used to evaluate potential construction noise and vibration impacts includes an evaluation of existing noise conditions, noise sources, and sensitive receptor distance compared to applicable local standards and FTA impact criteria for GBV, GBN, and construction noise.

Noise levels were evaluated based on the number and type of equipment operating, the level of operation, and the distance between sources and receptors. Construction and installation of wood poles and TSP along the Proposed Project would occur within 50 feet of a residential property. Generally, daily equipment usage would range from 2 to 8 hours per day. Therefore, eight

scenarios were modeled, based on anticipated equipment usage and the pole installation process. To provide a reasonable and conservative estimate of construction noise, the following eight scenarios were modeled with the FTA Roadway Noise Construction Model (FTA, 2006):

- Wood Pole Installation Scenario 1: one 210 horsepower (HP) auger truck and one 315 HP material handling truck
- Wood Pole Installation Scenario 2: one 250 HP man lift, one 350 HP boom/crane truck, and one 315 HP material handling truck
- TSP Installation Scenario 1: one 210 HP auger truck
- TSP Installation Scenario 2: one 125 HP backhoe/front loader
- TSP Installation Scenario 3: three 350 HP concrete mixers
- TSP Installation Scenario 4: one 315 HP material handling truck
- TSP Installation Scenario 5: one 350 HP dump truck, one 125 HP backhoe/front loader
- TSP Installation Scenario 6: one 350 HP boom/crane truck, one 315 HP material handling truck

The methodology used to evaluate potential Operations and Maintenance (O&M) noise impacts includes an evaluation of corona and electrical field effects from O&M of the Proposed 115 kV subtransmission line. Corona noise levels used in the analysis are based on the Electric Power Research Institute (EPRI) studies of corona effects and the typical noise levels for power lines with wet conductors.

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

Construction

Less Than Significant Impact. Construction activities are proposed to occur within the cities of Murrieta, Menifee, Perris, Temecula, and Riverside County. Potential construction noise impacts based on noise regulations for these municipalities are discussed below.

Noise from private construction is exempt from provisions of the noise regulations in the Riverside County Municipal Code if the construction activities occur one quarter-mile or more from an inhabited dwelling or if the activities occur between 6:00 a.m. and 6:00 p.m. during the months of June through September and between 7:00 a.m. and 6:00 p.m. during the months of October through May. Construction activities for the Proposed Project that occur within one quarter-mile of an inhabited residence would be restricted to the hours specified in the Riverside County Municipal Code. Therefore, the impact would be less than significant in unincorporated Riverside County.

The closest residence in the City of Murrieta is located west of SR-79, approximately 2,800 feet west of the Terminal TSP. As shown in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation, the maximum estimated noise level during construction of the Proposed Project would be 86 dBA L_{eq} at 50 feet, which would attenuate with distance (approximately 2,800 feet) to the closest residence in the City of Murrieta to approximately 51.5 dBA L_{eq}, which would be below the

maximum construction noise level of 75 dBA L_{max} for residences, shown in Table 4.12-4 City of Murrieta Construction Noise Standards. Therefore, the impact would be less than significant in the City of Murrieta.

The City of Menifee Municipal Code, Section 8.01.010, Hours of Construction, limits construction within one-quarter mile from an occupied residence to Monday through Saturday from 6:30 a.m. to 7:00 p.m., except on nationally recognized holidays. Construction activities for the Proposed Project that occur within one quarter-mile of an inhabited residence would be restricted to the hours specified in the City of Menifee Municipal Code. Therefore, the impact would be less than significant in the City of Menifee.

The closest residence in the City of Perris is approximately 3,600 feet from Material Staging Yard 3. As described in Section 3.7.1.1 Staging Areas, preparation of a material staging yard may include temporary perimeter fencing and, depending on existing ground conditions within the Proposed Project area, the application of gravel or crushed rock. Construction equipment used for material staging yard preparation could include a forklift and water truck, which would generate noise levels between 85 and 88 dBA, respectively, at 50 feet (FTA, 2006). This noise level would be further attenuated by the distance to the closest residence to approximately 48.3 and 51.3 dBA, respectively, and would not exceed the City's maximum noise level of 80 dBA for construction, as shown in Table 4.12-6 City of Perris Noise Level Standards. Therefore, the impact would be less than significant in the City of Perris.

The closest residence in the City of Temecula is approximately 175 feet from Segment 2 of the Proposed Project. Construction noise is exempt if the construction activities occur one quarter-mile or more from an inhabited dwelling, or if the activities occur between 7:00 a.m. and 6:30 p.m. on Monday through Saturday. Construction activities for the Proposed Project that occur within one quarter-mile of an inhabited residence would be restricted to the hours specified in the City of Temecula Municipal Code. Therefore, the impact would be less than significant in the City of Temecula.

In the event construction activities are anticipated on days or hours outside of what is specified by the local ordinances (for example, if existing lines must be taken out of service for the work to be performed safely and the line outage must be taken at night for system reliability reasons, or if construction needs require continuous work), SCE would provide five-day advanced notification, including a general description of the work to be performed, location, and hours of construction anticipated, to the CPUC, the local jurisdiction, and residents within 300 feet of the anticipated work, as well as route all construction traffic away from residences, schools, and recreational facilities to the maximum extent feasible. Additionally, potential noise impacts would be further reduced and controlled during equipment operation from noise reduction features (e.g., mufflers and engine shrouds) typically installed on SCE and SCE contractor equipment.

Operation

Less Than Significant Impact. O&M of the Proposed Project would generate noise primarily from the Proposed 115 kV subtransmission line. Equipment upgrades proposed at SCE's existing Valley 500/115 kV Substation would not increase current capacity, and therefore would not

increase noise generated by the substation. Routine maintenance activities and occasional emergency repairs are not anticipated to significantly contribute to current operational noise levels. Noise generated from the Proposed 115 kV subtransmission line and from routine maintenance activities and occasional emergency repairs is described below and compared to applicable standards or noise ordinances.

Noise generated during O&M of the Proposed 115 kV subtransmission line would be a crackling or hissing sound as a result of corona discharge associated with high voltage lines. Corona is usually not a design issue for subtransmission lines because the conductor size is of sufficient diameter to lower the localized electrical stress on the air at the conductor surface and would further reduce already low conductor surface gradients so that little or no corona activity would exist under most operating conditions. EPRI conducted several studies of corona effects and the typical noise levels for power lines with wet conductors, as shown in Table 4.12-9 Line Voltage and Audible Noise Level (CPUC, 2009).

Table 4.12-9 Line Voltage and Audible Noise Level

Line Voltage (kV)	Audible Noise Level Directly Below the Conductor (dBA)
138	33.5
240	40.4
356	51.0
Source: CPUC, 2009	

Because the Proposed Project includes installation of a 115 kV subtransmission line, audible noise is predicted to be less than the 33.5 dBA identified above for 138 kV subtransmission lines, based on studies conducted by EPRI. Therefore, the noise associated with electrical discharge from O&M of the Proposed 115 kV subtransmission line would be minor and would not result in exposure of persons or generate noise in excess of local standards or regulations. Therefore, noise impacts would be less than significant.

Routine inspection and maintenance activities would cause short-term or intermittent increases in noise along the Proposed 115 kV subtransmission line and within existing SCE substation boundaries. The inspections or maintenance as a result of the Proposed Project is not expected to be beyond the inspections and maintenance that is currently required within the existing rights-of-way. Any noise associated with inspections and maintenance would be temporary and short term, and activities would be conducted in accordance with all applicable noise regulations. Therefore, the noise impacts from these activities would be less than significant.

4.12.4.2 Would the project result in the exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Construction

Less Than Significant Impact. As presented in Table 3.9-A Subtransmission Construction Equipment and Workforce Estimates, typical equipment used during construction would include haul trucks, material handling trucks, forklifts, loaders, dozers, graders, compactors, sock line pullers, and cranes. As described in the Caltrans Transportation and Construction-Induced Vibration Guidance Manual, operation of haul trucks and dozers are the activities that could result in GBV due to travel and transport on cracked or faulting roadway surfaces. Vehicles traveling on smooth roadway are rarely, if ever, the source of perceptible GBV (Caltrans, 2004). Based on windshield observations of the existing roadways along the alignment of the Proposed 115 kV subtransmission line, roadways travelled during proposed construction activities are maintained and relatively smooth such that GBV is not anticipated due to the use of haul or material delivery trucks. Operation of the proposed 150 track type dozer during road and landing work would generate vibration at the source during ground disturbance and site preparation activities. Because a 150 track type dozer is roughly equivalent to what is commonly termed a small bulldozer, the construction vibration levels of a track type dozer are estimated to be approximate of a typical small bulldozer, as defined by FTA guidance (FTA, 2006).

As presented in Table 4.12-10 Construction Equipment Ground-borne Vibration Levels, GBV impacts have been evaluated based on operation of a track type dozer within 25 feet of a sensitive (residential) receptor. Vibration levels from operation of a track type dozer would equal 0.003 micro in/sec PPV and 58 VdB at 25 feet.

Table 4.12-10 Construction Equipment Ground-borne Vibration Levels

Equipment	PPV at 25 feet (micro in/sec)[1]	Approximate Lv (VdB) at 25 feet[2]
150 Track Type Dozer (Small Bulldozer)	0.003	58

Notes:

[1] Where PPV is the peak particle velocity

[2] Where Lv is the RMS velocity level expressed in vibration decibels (VdB). This is based on a crest factor of 4 (RMS relative to PPV).

Source: FTA, 2006

Vibrations from construction equipment spread through the ground and diminish in strength with distance. Caltrans guidelines recommend that a standard of 0.2 micro in/sec PPV not be exceeded for the protection of normal residential buildings (Caltrans, 2004). Operation of the track type dozer is estimated at 0.003 micro in/sec PPV at 25 feet, which would be less than the Caltrans criteria of 0.2 micro in/sec PPV at 25 feet. In addition, track type dozers would only be

operated at a distance greater than 25 feet from existing structures, and that greater distance would diminish vibration levels even further. Therefore, the impact would be less than significant.

The threshold for human perception is approximately 65 VdB. Vibration levels in the range of 70 to 75 VdB are often noticeable but acceptable. Beyond 80 VdB, vibration levels often are considered unacceptable by building occupants (FTA, 2006). Construction activities would involve temporary ground-disturbing activities, including potential vibration from operation of the track type dozer. However, these activities are not anticipated to generate excessive GBV or noise, as typical GBV for a track type dozer is less than 65 VdB at 50 feet, which is considered barely perceptible to humans (FTA, 2006). Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project would consist of routine maintenance activities and emergency repairs. These activities would be unlikely to produce excessive GBV or GBN levels. The impact would be less than significant.

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

Construction

No Impact. Construction of the Proposed Project would temporarily cause sporadic noise during daytime hours. Periods of construction at a specific location typically would not exceed 10 days, and, thus, no permanent increase above ambient noise levels would occur in the Proposed Project vicinity. Therefore there would be no impact under this criterion.

Operation

Less Than Significant Impact. O&M of the Proposed Project would generate noise primarily from the Proposed 115 kV subtransmission line. As presented in Table 4.12-9 Line Voltage and Audible Noise Level, audible noise is predicted to be less than 33.5 dBA based on studies conducted by EPRI. Daytime ambient noise levels were measured to range between 50 dBA and 64 dBA L_{eq}, as presented in Table 4.12-3 Summary of Ambient Noise Measurements (Proposed Project). Lowest ambient noise levels would occur at the quietest hour of the night, which would typically be approximately 10 dBA less than daytime ambient. In addition, typical ambient rural residential areas would be higher than the 115 kV subtransmission line noise levels of approximately 30 dBA. Therefore, a substantial permanent increase above ambient noise levels would not occur.

Proposed Project O&M details described in Section 3.8, Project Operation and Maintenance are short term and would not permanently increase ambient noise levels near noise sensitive receptors in the Proposed Project area. Consequently, maintenance activities would not result in a significant increase in noise levels compared to ambient conditions.

O&M of the Proposed Project would not create a substantial permanent increase in ambient noise levels in the vicinity of the Proposed Project. The impact would be less than significant.

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

Construction

Less Than Significant Impact. Construction of the Proposed Project would require operation of a variety of equipment. As described in Section 4.12.4, Impact Analysis, noise impacts were modeled based on construction equipment operations that would occur during installation of wood poles and TSPs. Modeled noise levels for construction equipment at 50 feet from the source are presented in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation, and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation.

As shown in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation, the highest combined noise level for construction equipment associated with the Proposed Project at 50 feet would be approximately 86 dBA L_{eq} at 50 feet (for TSP installation) (see Appendix H, Noise Methodology and Measurements). These construction noise levels are below the daytime hourly average noise level of 90 dBA L_{eq} at 50 feet from a residence, identified by the FTA as the construction noise level where adverse community reaction can occur (FTA, 2006). The Proposed Project's construction noise levels would be further attenuated by distance of the construction activities to the receptors and by intervening structures and vegetation.

Table 4.12-11 Modeled Noise Levels during Wood Pole Installation

Wood Pole Installation Scenarios					
Scenario	**Equipment**	**HP**	**Quantity**	**Hrs/Day[1]**	**Noise Level at 50 feet**
Scenario 1	Auger Truck	210	1	1	78.5 dBA Leq
	Material Handling Truck	315	1	2	
Scenario 2	Manlift/Bucket Truck	250	1	1.5	82.6 dBA Leq
	Boom/Crane Truck	350	1	1.5	
	Material Handling Truck	315	1	2	

Note:

[1] Equipment usage is based on the total hours of operation per day, as presented in Table 3.10-A Subtransmission Construction Equipment and Workforce Estimates, and has been divided by 4, based on anticipated installation of 4 poles per day. Therefore, only a quarter of the total daily usage would occur at one location at a time, within 50 feet of residential receptors.

Source: Data compiled by AECOM in 2013

Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation

Tubular Steel Pool Installation					
Scenario	**Equipment**	**HP**	**Quantity**	**Hrs/Day[1]**	**Noise Level at 50 feet**
Scenario 1	Auger Truck	210	1	6	83.8 dBA Leq
Scenario 2	Backhoe/Front Loader	125	1	6	78.8 dBA Leq
Scenario 3	Concrete Mixer Truck	350	3	2	83.8 dBA Leq
Scenario 4	Material Handling Truck	315	1	8	84.0 dBA Leq
Scenario 5	Dump Truck	350	1	4	83.0 dBA Leq
	Backhoe/Front Loader	125	1	6	
Scenario 6	Boom/Crane Truck	350	1	4	86.1 dBA Leq
	Material Handling Truck	315	1	8	

Note:

[1] Equipment usage is based on the total hours of operation per day, as presented in Table 3.10-A Subtransmission Construction Equipment and Workforce Estimates.

Source: Data compiled by AECOM in 2013

Although the Proposed Project's construction noise levels of approximately 86 dBA L_{eq} at 50 feet would attenuate by 6 dBA per doubling of distance (i.e., 80 dBA L_{eq} at 100 feet, 74 dBA L_{eq} at 200 feet, etc.), construction noise could exceed, at some locations near the construction sites, the existing 46 dBA to 62 dBA (L_{eq}) daytime ambient noise levels monitored within the Proposed Project vicinity.

CEQA does not define what is considered to be a "substantial" increase. However, other agencies, such as Caltrans, define a substantial increase in noise levels as approximately a 10 dBA increase. A 10 dBA increase is subjectively perceived by humans as approximately twice as loud, as presented in Table 4.12-1 Subjective Reaction to Changes in Noise Levels of Similar Sources (Caltrans, 2009).

While construction noise would be noticeable, the noise levels identified in this analysis are typically considered acceptable for construction activities during daytime hours and do not exceed the daytime hourly L_{eq} of 90 dBA noise level identified by the FTA as the construction noise level where adverse community reaction can occur. In addition, construction would comply

with all applicable noise ordinance construction time-of-day limits. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. Periodic activities during O&M of the Proposed Project would consist of routine, short-term inspection and maintenance of its facilities, which would include passenger vehicle travel by personnel to the Proposed 115 kV subtransmission line.

As discussed above, noise generated during O&M of the Proposed 115 kV subtransmission line is predicted to be less than 33.5 dBA based on studies conducted by EPRI. Therefore, the noise associated with O&M of the Proposed 115 kV subtransmission line would be minor and would not result in a substantial temporary or periodic increase in ambient noise levels in the Proposed Project vicinity above levels existing without the Proposed Project. The impact would be less than significant.

4.12.4.5 For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

Construction

No Impact. French Valley Airport is located approximately 0.45 of a mile west of Segment 2 of the Proposed Project. The southern portions of the Proposed Project lie within the Airport Land Use Compatibility Plan Zones B1, C and D for French Valley Airport.

The acceptable level of aircraft noise for sensitive receptors living in the vicinity of airports is specified in Title 21 of the California Code of Regulations, Section 5012 as a CNEL of 65 dBA. The Comprehensive Land Use Plan for French Valley Airport (Riverside County Airport Land Use Commission, 2011) provides airport noise CNEL contours radiating out from the airport runway from 70 to 55 dBA CNEL in the vicinity of the airport. The 65 dBA CNEL contour is the limit for residential exterior areas to achieve the California 45 dBA CNEL residential interior standard assuming a 20 dBA reduction from housing design with windows closed. The Proposed Project is not located within these contour areas. Therefore, Proposed Project construction would not expose people working or residing along the Proposed Project to excessive noise levels from aircraft and Proposed Project construction. No impact would occur.

Operation

No Impact. As described under Construction Impacts, the Proposed Project is not located within areas where the CNEL from activities associated with the French Valley Airport would exceed the acceptable level of aircraft noise for residential areas. Therefore, O&M of the Proposed Project would not expose people working or residing in the area to excessive noise levels. No impact would occur.

4.12.4.6 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?

Construction

No Impact. Two private airstrips and one private helipad are within 2 miles of the Proposed Project: Pines Airpark (approximately 0.55 of a mile east of Segment 1 of the Proposed 115 kV subtransmission line), Perris Valley Airport (approximately 0.12 of a mile south of Material Staging Yard 3), and SCE Menifee Service Center Helipad (approximately 0.18 of a mile east of SCE's existing Valley 500/115 kV Substation). Only small recreational aircraft that generate comparatively low levels of noise utilize these airstrips and helipad. Proposed Project construction would not expose construction personnel or people residing or working in the area to excessive noise levels. No impact would occur.

Operation

No Impact. As described above, the Proposed Project is located within 2 miles of two private airstrips and one private helipad. However, O&M of the Proposed Project would not subject operations personnel or people residing or working in the area to excessive noise levels. No impact would occur.

4.12.5 Applicant Proposed Measures

Because less than significant impacts to noise would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.12.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would

follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Segment 1 of the Alternative Project would be closer to a greater number of sensitive receptors (e.g., residences, schools), compared to the Proposed Project. In particular, Segment 1 of the Alternative Project route would be located within 50 feet of residences in the City of Murrieta.

Short-term (15-minute) ambient noise level measurements were taken along Segment 1 of the Alternative Project by AECOM at two locations on November 1, 2012 to characterize the existing daytime (ambient) noise environment. The same measurement methodology used for Segment 1 of the Proposed Project, discussed previously, was used for Segment 1 of the Alternative Project. The L_{eq} and L_{max} noise levels were monitored during 15-minute periods at locations ST-06 and ST-07, shown in Figure 4.12-2 Ambient Noise Monitoring Locations. These monitored 15-minute L_{eq} and L_{max} noise levels can be considered representative of the hourly L_{eq} and L_{max} at these monitor locations. The results of these measurements are summarized in Table 4.12.13 Summary of Ambient Noise Measurements (Segment 1 of the Alternative Project).

Table 4.12-13 Summary of Ambient Noise Measurements (Segment 1 of the Alternative Project)

Site	Residential[1]	Time	Noise Source	Sound Level (dBA)	
				L_{eq}	L_{max}
ST-06	About 75 feet northwest of the corner of Petunia Street and Poinsettia Street, on the lawn at a small park east of 33811 Sundrop Avenue, Murrieta, CA 92563	11/1/2012 16:16 to 16:30	Vehicle Noise	50	59
ST-07	About 180 feet northwest of the corner of Scott Road and Lindenberger Road,	11/1/2012 16:43 to	Vehicle Noise	64	69

Site	Residential[1]	Time	Noise Source	Sound Level (dBA)	
				L_{eq}	L_{max}
	on a vacant lot north of 33020 Iolite Street, Menifee, CA 92584	16:57			

Notes:

Acronyms: dBA = A-weighted decibels; L_{eq} = average noise level over a given period; L_{max} = highest measured noise level

[1] Receptors located in closest proximity to proposed construction activities include private residences. Therefore, baseline noise measurements were taken within proximity to residential receptors located within 50 feet of the Proposed 115 kV subtransmission line.

Source: Data compiled by AECOM in 2013

As presented in Table 4.12-13 Summary of Ambient Noise Measurements (Segment 1 of the Alternative Project), average daytime noise levels ranged from 50 dBA to 64 dBA L_{eq} with instantaneous maximum noise levels ranging from 59 dBA to 69 dBA L_{max} (attributable to vehicle traffic and local garbage collection).

Segment 1 of the Alternative Project's construction noise levels could exceed, at some locations near the construction sites, the existing 50 dBA to 64 dBA L_{eq} ambient noise levels measured along Segment 1 of the Alternative Project. However, CEQA has not defined what is considered to be a "substantial" increase. While construction noise could temporarily increase ambient noise levels along Segment 1 of the Alternative Project, the levels identified in this analysis are typically considered acceptable for construction activities during daytime hours and do not exceed the FTA daytime hourly average noise level of 90 dBA L_{eq} identified by the FTA as the construction noise level where adverse community reaction can occur. In addition, construction would comply with all applicable noise ordinance time limits. Therefore, the impact would be less than significant.

Construction of Segment 1 of the Alternative Project would require the installation of several wood poles and TSPs. As described in Section 4.12.4, Impact Analysis, noise impacts were modeled based on construction equipment operations that would occur during installation of wood poles and TSPs. As shown in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation, the maximum estimated noise level during construction of the Proposed Project would be 86 dBA at 50 feet during TSP installation, which would attenuate by 6 dBA per doubling of distance (i.e., 80 dBA at 100 feet, 74 dBA at 200 feet). These construction noise levels are below the FTA daytime hourly average noise level of 90 dBA L_{eq} at 50 feet from a residence (FTA, 2006). However, in the City of Murrieta, the maximum allowable construction noise level at single-family residences during daytime is 75 dBA, as shown in Table 4.12-4 City of Murrieta Construction Noise Standards. Noise impacts during construction of Segment 1 of the Alternative Project in the City of Murrieta would likely be significant and unavoidable.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

A short-term (15-minute) ambient noise level measurement was taken along Segment 2 of the Alternative Project by AECOM at one location on April 24, 2014 to characterize the existing daytime (ambient) noise environment. The same measurement methodology was used as for Segment 2 of the Proposed Project, discussed previously. The L_{eq} and L_{max} noise levels were monitored during 15-minute periods at location ST-08, shown in Figure 4.12-2 Ambient Noise Monitoring Locations. These monitored 15-minute L_{eq} and L_{max} noise levels can be considered representative of the hourly L_{eq} and L_{max} noise levels at this monitor location. The results of these measurements are summarized in Table 4.12-14 Summary of Ambient Noise Measurements (Segment 2 of the Alternative Project).

Table 4.12-14 Summary of Ambient Noise Measurements (Segment 2 of the Alternative Project)

Site	Residential[1]	Time	Noise Source	Sound Level (dBA)	
				L_{eq}	L_{max}
ST-08	About 50 feet east and 50 feet south of intersection of Briggs Road and Los Alamos Road along existing subtransmission line in the City of Murrieta	4/24/2014 14:36 to 14:51	Vehicle Noise	57	86

Notes:

Acronyms: dBA = A-weighted decibels; L_{eq} = average noise level over a given period; L_{max} = highest measured noise level

[1] Receptors located in closest proximity to proposed construction activities include private residences. Therefore, baseline noise measurement was taken within proximity to residential receptor located adjacent to the Proposed 115 kV subtransmission line.

Source: Data compiled by AECOM in 2014

As presented in Table 4.12-14 Summary of Ambient Noise Measurements (Segment 2 of the Alternative Project), the monitored average daytime noise level was 57 dBA L_{eq}, with an instantaneous maximum level of 86 dBA L_{max} (attributable to vehicle traffic and local garbage collection).

Segment 2 of the Alternative Project's construction noise levels could exceed, at some locations near the construction sites, the existing 57 dBA L_{eq} ambient noise level measured along Segment 2 of the Alternative Project. However, CEQA does not define what is considered a "substantial"

increase. While construction noise would temporarily increase ambient noise levels along Segment 2 of the Alternative Project, the levels identified in this analysis are typically considered acceptable for construction activities during daytime hours and do not exceed the FTA daytime hourly average noise level of 90 dBA L_{eq} identified by the FTA as the construction noise level where adverse community reaction can occur. In addition, construction would comply with all applicable noise ordinance construction time of day limits. Therefore, the impact would be less than significant.

Construction of Segment 2 of the Alternative Project would require the installation of several wood poles and TSPs. As described in Section 4.12.4, Impact Analysis, noise impacts were modeled based on construction equipment operations that would occur during installation of wood poles and TSPs. As shown in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation, the maximum estimated noise level during construction of the Proposed Project would be 86 dBA at 50 feet during TSP installation, which would attenuate by 6 dBA per doubling of distance (i.e., 80 dBA at 100 feet, 74 dBA at 200 feet). These construction noise levels are below the FTA daytime hourly average noise level of 90 dBA L_{eq} at 50 feet from a residence (FTA, 2006). However, in the City of Murrieta, the maximum allowable construction noise level for single-family residences during daytime is 75 dBA, as shown in Table 4.12-4 City of Murrieta Construction Noise Standards. Noise impacts during construction of Segment 2 of the Alternative Project in the City of Murrieta would likely be significant and unavoidable.

4.12.7 References

California Department of Transportation (Caltrans). 2004. *Transportation and Construction-Induced Vibration Guidance Manual*, 27; Table 19. Sacramento, CA.

———. 2009 (November). Division of Environmental Analysis. *Technical Noise Supplement*. Sacramento, CA. Prepared by ICF Jones & Stokes, Sacramento, CA.

———. 2009. Electric Power Research Institute (EPRI) studies on Line Voltage and Audible Noise City of Menifee. 2010. City of Menifee Municipal Code. Section 8.01 – Administrative Provisions. Available: http://www.amlegal.com/nxt/gateway.dll/California/menifee_ca/title8buildingsandconstruction/chapter801administrativeprovisions?f=templates$fn=altmain-nf.htm$3.0#JD_Chapter8.01. Accessed February 2013.

City of Menifee. 2010. City of Menifee, Code of Ordinances, Title 8 Buildings and Construction, Chapter 8.01 Administrative Provisions, Section 8.01.010 Hours of Construction. November 16. Available at http://www.amlegal.com/nxt/gateway.dll/California/menifee_ca/cityofmenifeecaliforniacodeofordinances?f=templates$fn=default.htm$3.0$vid=amlegal:menifee_ca

2013. General Plan Update. Available: http://cityofmenifee.us/index.aspx?nid=176. Accessed January 11, 2013.

City of Murrieta. 2012. City of Murrieta Development Code. Section 16.30.130.

City of Perris. 2000. City of Perris Municipal Code. Chapter 7.34 – Noise Control. Available: http://library.municode.com/HTML/16553/level2/TIT7HEWE_CH7.34NOCO.html#TIT7HEWE_CH7.34NOCO_7.34.040SOAM. Accessed February 2013.

———. 2005. *Comprehensive General Plan 2030*. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed February 2013.

City of Temecula.

———. 2005. *General Plan, Noise Element*. Available: http://www.cityoftemecula.org/NR/rdonlyres/DE308781-2A54-4DF6-9775-467426FE14C8/0/Noise.pdf

2007. City of Temecula Municipal Code. Chapter 9.20 – Noise. Available at: http://www.qcode.us/codes/temecula/

Egan. 1988. *Architectural Acoustics*. McGraw-Hill, Inc.

Federal Transit Administration (FTA). 2006 (May). *Transit Noise and Vibration Impact Assessment*. Washington, DC.

Lipscomb, D. M., and A. C. Taylor, Jr. 1978. *Noise Control Handbook of Principles and Practices*. New York, NY: Van Nostrand Reinhold Company.

Riverside County Airport Land Use Commission. 2011. Draft 2011 French Valley Policies and Maps. Available: http://www.rcaluc.org/filemanager/plan/fv/French%20Valley%20Airport%20Initial%20Study%20and%20Mitigated%20Neg.%20Dec.pdf

Riverside County. 2006. Riverside County Municipal Code. Chapter 9.25 – Noise Regulation. Available: http://library.municode.com/index.aspx?clientID=16320&stateID=5&statename=California. Accessed February 2013.

———. 2008. *Riverside County General Plan*, *Noise Element*. Available: http://www.rctlma.org/genplan/general_plan_2008/general_plan/Chapter_7_Noise_Element_2008.pdf. Accessed February 2013.

Section 4.13
Population and Housing

4.13 Population and Housing

This section describes population and housing in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.13.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

The historic and future population growth data for unincorporated Riverside County and the cities of Murrieta, Menifee, and Temecula are presented in Table 4.13-1 Historic and Estimated Population in Surrounding Jurisdictions. The population in unincorporated Riverside County is estimated to increase by 42 percent between 2010 and 2035. The population in the cities of Menifee, Murrieta, and Temecula are estimated to increase between 2010 and 2035 by 53 percent, 17 percent, and 19 percent, respectively.

Table 4.13-1 Historic and Estimated Population in Surrounding Jurisdictions

Year[3]	Unincorporated Riverside County[1]	City of Menifee	City of Murrieta	City of Temecula
2000 (CDF, 2012)	420,721	NA[2]	44,282	57,716
2005 (CDF, 2012)	523,318	NA[2]	85,769	78,808
2010 (CDF, 2012)	504,392	77,519	103,466	100,097
2020 (SCAG, 2012)	471,500	93,100	109,300	109,800
2035 (SCAG, 2012)	710,600	119,400	121,100	118,900

Notes:

[1] Decrease in population of Unincorporated Riverside County between 2005 and 2010 can be attributed to the incorporation of areas that were previously unincorporated, such as the City of Menifee.

[2] NA = Population information not available because the City of Menifee was incorporated in 2008.

[3] CDF reports the historical data only for the years 2000, 2005, and 2010, while SCAG only provides forecast data for the years 2020 and 2035.

Sources: California Department of Finance (CDF), 2012; Southern California Association of Governments (SCAG), 2012

4.13.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.13.2.1 Federal

There are no federal regulations related to population and housing that would apply to the Proposed Project.

4.13.2.2 State

There are no state regulations, plans, and standards for population and housing that apply to the Proposed Project.

4.13.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The Housing Element of the Riverside County General Plan (Riverside County, 2013) identifies and establishes the County's policies with respect to meeting the needs of existing and future residents in Riverside County. There are no specific policies of the County's Housing Element that would have any implications for the Proposed Project.

City of Menifee General Plan

The Draft Housing Element 2008-2014 of the City of Menifee General Plan (City of Menifee, 2012) does not contain any specific goals or policies relevant to electric utility projects that would have any implications for the Proposed Project.

City of Murrieta General Plan

The adopted 2008-2014 Housing Element of the City of Murrieta General Plan (City of Murrieta, 2011) does not contain any specific goals, policies, or actions relevant to electric utility projects that would have any implications for the Proposed Project.

City of Temecula General Plan

The City of Temecula General Plan Housing Element (City of Temecula, 2013) does not contain any specific goals or policies relevant to electric utility projects that would have any implications for the Proposed Project.

4.13.3 Significance Criteria

The significance criteria for assessing the impacts to population and housing are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Induce substantial population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., 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

4.13.4 Impact Analysis

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

Construction

No Impact. Construction of the Proposed Project would not be anticipated to induce population growth. The purpose of the Proposed Project is to serve the existing and anticipated population within SCE's Electrical Needs Area to meet projected load requirements, as described in Chapter 2.0, Project Purpose and Need and Objectives, of this Proponent's Environmental Assessment (PEA). Construction of the Proposed Project would occur over approximately 16 months, and SCE anticipates a total of approximately 67 construction personnel working on any given day. Construction would take place in a linear manner and therefore activities would be transient and would not occur in one area for an extended period. The labor demands of the Proposed Project would be met by existing SCE employees or by hiring specialty electrical transmission contractors. The small number of positions required during the short construction phase would not directly or indirectly induce any population growth in the area.

The Proposed Project could require a limited amount of accommodations for personnel during construction. If such a need for temporary accommodations arises, adequate lodging options would be available in the nearby cities of Temecula, Menifee, Murrieta, Hemet, and Perris to meet this need. Therefore, the Proposed Project would not directly or indirectly induce population growth in the Proposed Project area. Thus, no impact would occur.

Operation

No Impact. The Proposed Project would create additional 115 kV subtransmission line capacity to provide electrical service to portions of unincorporated Riverside County; the cities of Menifee, Murrieta and Temecula, and the greater Electrical Needs Area (see Figure 1.2 Electric Needs Area). The Proposed Project is required to ensure the availability of safe and reliable electric service to meet customer electrical demand in the Electrical Needs Area. The Proposed Project would not induce growth, but instead is designed to respond to existing growth and demand trends. The Proposed Project would not include building new homes or businesses or any increase in infrastructure in a manner that would lead to substantial population growth in the region.

As stated in Section 3.8, Operations and Maintenance, the normal Operations and Maintenance (O&M) of the Proposed Project and associated components would be controlled remotely through SCE control systems, and manually in the field, as required. The number of personnel required to inspect and/or maintain the new line would not induce substantial population growth because it is anticipated that existing SCE staff would service the Proposed Project once operational. Because no new SCE staff would be required for the O&M of the Proposed Project, no impact would occur.

4.13.4.2 Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Construction

No Impact. Although residences are located near portions of the Proposed 115 kV subtransmission line, existing housing would not be displaced by construction of the Proposed Project. Therefore, there would be no need to construct replacement housing. Additionally, adequate hotel and motel accommodations exist, as well as short-term rental facilities in the vicinity of the Proposed Project, to provide accommodations for any construction personnel who may temporarily need them during construction activities. Therefore, no impact would occur.

Operation

No Impact. O&M of the Proposed Project would not require the displacement of any existing housing. The Proposed 115 kV subtransmission line would be controlled remotely through SCE control systems, and manually in the field, and would not require regular staffing. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles, tree trimming, brush and weed control, and access road maintenance. These tasks would not displace existing housing. Therefore, O&M of the Proposed Project would not require the construction of replacement housing elsewhere. No impact would occur.

4.13.4.3 Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Construction

No Impact. There are no residences located within the Proposed Project construction areas. Construction of the Proposed Project would not displace any residents or result in the removal of any residences in Riverside County. As a result, construction of the Proposed Project would not require the construction of replacement housing elsewhere. Therefore, construction of the Proposed Project would not result in impacts related to displacing substantial numbers of people that would necessitate construction of replacement housing.

Operation

No Impact. As with construction, O&M of the Proposed Project would not displace any people. The Proposed 115 kV subtransmission line would be controlled remotely through SCE control systems, and manually in the field, and therefore would not require regular staffing. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles, tree trimming, brush and weed control, and access road maintenance. This work would be temporary and would not displace any residents in the area. Therefore, O&M of the Proposed Project would not require the construction of replacement housing.

4.13.5 Applicant Proposed Measures

Because no impacts to population and housing would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.13.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Segment 1 of the Alternative Project would occur on existing and newly acquired easements and franchise rights, located along existing roads or vacant land, and would not include new homes or businesses. Similar to Segment 1 of the Proposed Project, no impact would occur.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

This approximately 2-mile-long segment would occur on existing subtransmission lines and easements located along existing roads or vacant land, and would not include new homes or businesses. Similar to Segment 2 of the Proposed Project, no impact would occur.

Construction personnel for the Alternative Project are anticipated to be available from the local or regional labor pool because the skills required are not unusual within the construction industry. The 16-month construction schedule is considered short term. If a need for temporary accommodations would arise during construction, existing lodging in nearby cities could adequately meet that need. Also, similar to the Proposed Project, the Alternative Project would be built to meet electrical needs in the area. Therefore, construction and O&M of the Alternative Project would not displace people, houses, or businesses, nor would it directly or indirectly induce population growth. Thus, no impact would occur.

4.13.7 References

City of Menifee. 2012. City of Menifee General Plan, Draft Housing Element 2008-2014. July 18, 2012. Available: http://www.cityofmenifee.us/index.aspx?NID=261. Accessed April 2014.

City of Murrieta. 2011. City of Murrieta General Plan, 2008-2014 Housing Element. June 2011. Available: http://www.murrieta.org/cityhall/cd/planning/general.asp. Accessed April 2014.

City of Temecula. 2013. City of Temecula General Plan Housing Element. December 2013. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014.

Riverside County. 2013. County of Riverside General Plan Update 2008. General Plan Amendment No. 960. Chapter 8 – Housing Element 2006-2014. February 13, 2013. Available: http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx. Accessed April 2014.

Southern California Association of Governments (SCAG). 2012. Adopted Growth Forecast. Available: http://www.scag.ca.gov/forecast/index.htm. Accessed September 2012 and April 2014.

State of California, Department of Finance (CDF). 2012. E-4 Historical Population Estimates for City, County and the State, 2001-2010, with 2000 and 2010 Census Counts. Sacramento, CA. Available: http://www.dof.ca.gov/research/demographic/reports/estimates/e-4/2001-10. Accessed September 2012 and April 2014.

Section 4.14
Public Services

4.14 Public Services

This section describes the public services in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.14.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at SCE's existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

Fire protection, law enforcement, schools, libraries, and hospitals in the vicinity of the Proposed Project are described in the following paragraphs.

4.14.1.1 Fire Protection

The Riverside County Fire Department (RCFD) maintains a contractual relationship with the California Department of Forestry and Fire Protection (CAL FIRE) to provide fire protection services and emergency response services to the unincorporated areas of the county, 21 contract cities, and one community service district (RCFD, 2011). RCFD in cooperation with CAL FIRE includes city, county, state, and volunteer fire stations in its regional, integrated fire protection organization (RCFD, 2013a). The cities of Menifee, Perris, and Temecula are part of the county's cooperative system (RCFD, 2009).

RCFD operates 94 fire stations providing fire protection, rescue, emergency medical services, hazardous materials response, and fire prevention education. In 2011, RCFD employed 1,145 firefighters, 240 support staff, and 280 volunteer reserve firefighters (RCFD, 2011). Most RCFD fire stations have a minimum of two career firefighters (typically, a captain and a firefighter) on duty at all times. Volunteer firefighters typically augment the career firefighters on the first responding engine (Riverside County, 2008).

The RCFD Emergency Command Center (ECC) is a full service regional command and control center, providing dispatch services to all unincorporated county areas, 21 contract cities, one community service district, and three Native American fire departments (RCFD, 2011). When a call for service is received by the ECC, Riverside County's mutual aid coordinator determines whether a city or the county would respond (Riverside County, 2008).

As shown in Figure 4.14-1 Public Services, there are several RCFD stations located within the vicinity of the Proposed Project: Sun City Fire and Menifee Lakes Fire Station are both located in the City of Menifee; Perris Station is located in the City of Perris; Rancho California Fire Station is located in the City of Temecula; Winchester Fire Station Homeland Fire Station and French Valley Fire Station are located in unincorporated Riverside County. As shown in Figure 4.14-1 Public Services Homeland Fire Station and French Valley Fire Station are located within 1 mile of the Proposed Project.

The Murrieta Fire Department is the primary provider of fire suppression, emergency medical care, disaster preparedness coordination, hazard mitigation, and fire prevention services within the City of Murrieta. It currently employs 48 personnel at five stations and administrative offices (City of Murrieta Fire Department, 2012). As shown in Figure 4.14-1 Public Services three Murrieta fire stations would be located within the vicinity of the Proposed Project: Murrieta Fire Station No. 2 , Murrieta Fire Station No. 3, and Murrieta Fire Station No. 4. Murrieta's nearest fire station to the Proposed Project is Murrieta Fire Station No. 4, which is located 2.64 miles west of the Proposed Project. The RCFD and the Murrieta Fire Department would provide fire protection services to the Proposed Project and surrounding area, including the cities of Menifee, Murrieta, Perris, and Temecula.

4.14.1.2 Law Enforcement

The Riverside County Sheriff's Department and City of Murrieta Police Department would provide law enforcement services to the Proposed Project and surrounding area, as described below.

Riverside County Sheriff's Department provides law enforcement services via 10 Sheriff's Stations spread across the county. Many cities contract with the Riverside County Sheriff's Department for municipal police services, including the cities of Menifee, Perris, and Temecula. Other cities, such as the City of Murrieta, maintain their own police departments (Riverside County, 2013a). The Riverside County Sheriff's Department has 2,720 employees, including 1,330 sworn personnel, who provide community policing services (Riverside County, 2008).

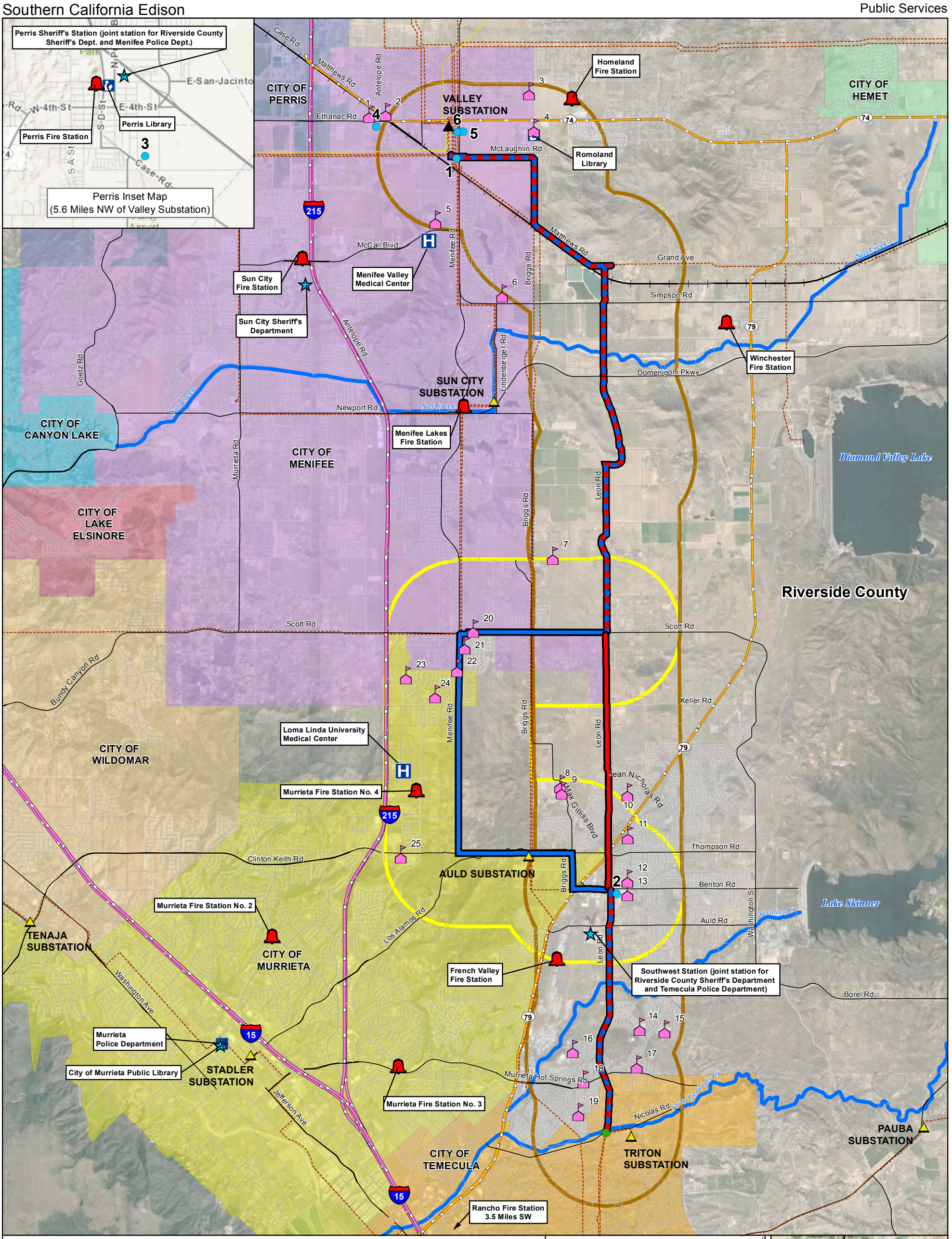
Riverside County Sheriff's Department established the following staffing requirements in unincorporated areas of the county (Riverside County, 2008).

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 4.14-1

Southern California Edison

Public Services



Chapter 4

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- One sworn officer per 1,000 people
- One supervisor and one support staff employee per seven officers
- One patrol vehicle per three sworn officers
- One school resource officer per school

Riverside County Sheriff's Department Perris Station (referred to as the Perris Sheriff's Station) is approximately 5 miles from the Proposed Project. The Perris Sheriff's Station serves the cities of Perris, Canyon Lake, and Menifee, as well as the unincorporated communities surrounding the station (Riverside County, 2013b). In 2010, Perris Sheriff's Station was staffed with 158 sworn deputies and 36 classified employees (Riverside County, 2010). Perris Sheriff's Station, Perris Police Department, Canyon Lake Police Department, and Menifee Police Department are located in the same facility at 137 North Perris Boulevard, Perris, California (City of Menifee, 2013a; Riverside County, 2013b).

Riverside County Sheriff's Department Southwest Station (located 0.25 of a mile from the Proposed Project at 30755-A Auld Road, Murrieta, California) serves the City of Temecula, and the De Luz Community Services District, as well as other unincorporated communities. Southwest Station is a joint station for the Riverside County Sheriff's Department and the City of Temecula Police Department. Southwest Station includes 87 sworn officers and 43 civilians as support staff (Firmes, 2012). The City of Temecula currently has two store-front office locations (one in Old Town Temecula and one in the Promenade Mall), a traffic unit, detective bureau, and special teams to deal with drugs and gang-related issues (City of Temecula Police Department, 2013).

The City of Murrieta Police Department is a city-operated police agency that provides law enforcement services for the city (City of Murrieta Police Department, 2012). The City of Murrieta Police Department has one police station (located at 2 Town Square, Murrieta, California), which is located approximately 5.19 miles from the Proposed Project. However, the City of Murrieta Police Department has an automatic aid agreement with the Hemet Police Department Special Weapons and Tactics (SWAT) Team and participates in mutual aid agreements with other SWAT Teams in Riverside County (City of Murrieta, 2011).

4.14.1.3 Schools

There are 23 school districts within Riverside County. Table 4.14-1 Schools Located Within 1 Mile of the Proposed Project, lists the public and private schools, including daycares, preschools, and colleges/universities, located within 1 mile of the Proposed Project[4]. The locations of the schools in relation to the Proposed Project are depicted in Figure 4.14-1 Public Services.

[4] It should be noted that the Perris Union High School District (PUHSD) is beginning planning for a third high school serving the City of Menifee, High School No. 4 (City of Menifee, 2013b). The PUHSD High School No. 4 is located at the southeast corner of Leon Road and Wickerd Road in unincorporated Riverside County within 1 mile of the Proposed Project. As this school has not been built yet, it is not included in Table 4.14-1 Schools Located Within 1 Mile of the Proposed Project or in Figure 4.14-1 Public Services. However, this school site is included in Section 4.18, Cumulative Analysis of this PEA.

Table 4.14-1 Schools Located Within 1 Mile of the Proposed Project

Number on Map[1]	School Name	School Address	Proximity to Project (Miles)[2]
1	Oliver Christian School Center	27805 Ethanac Road, Sun City, CA 92586	1.11
2	Romoland Elementary School	25890 Antelope Road, Romoland, CA 92585	0.88
3	Harvest Valley Elementary School	29955 Watson Road, Menifee, CA 92585	0.88
4	Heritage High School	26001 Briggs Road, Romoland, CA 92585	0.39
5	Boulder Ridge Middle School	27327 Junipero Road, Romoland, CA 92585	0.91
6	Mesa View Elementary School	27227 Heritage Lake Drive, Romoland, CA 92585	1
7	The Riding Academy	30300 Garbani Road, Menifee, CA 92584	0.68
8	Dorothy McElhinney Middle School	35125 Briggs Road, Murrieta, CA 92563	0.66
9	Lisa J. Mails Elementary	35185 Briggs Road, Murrieta, CA 92563	0.64
10	Home Away From Home Daycare	Peregrine Way and Slater Avenue, Winchester, CA 92596	0.25
11	Susan La Vorgna Elementary School	31777 Algarve Avenue, Winchester, CA 92596	0.27
12	Crane's Nest Family Preschool	Amsterdam Road and B Street, French Valley, CA 92596	0.26
13	French Valley University Inc.	36555 Van Gaale Lane, Winchester, CA 92596	0.22
14	Los Alamos Elementary	38200 Pacific Park Drive, Murrieta, CA 92563	0.43
15	Bella Vista Middle School	31650 Browning Street, Murrieta, CA 92563	0.77

Number on Map[1]	School Name	School Address	Proximity to Project (Miles)[2]
16	Morningstar Christian Academy	30513 N. Gate Lane, Murrieta, CA 92563	0.37
17	Just Like Home Daycare	38889 Autumn Woods Road, Murrieta, CA 92563	0.47
18	Sarah's Sweetheart's Family Daycare	30654 San Anselmo Drive, Murrieta, CA 92563	0.28
19	Nicolas Valley Elementary	39600 N. General Kearny Road, Temecula, CA 92591	0.41

Notes:

[1] Map numbers correspond to Figure 4.14-1 Public Services

[2] The distance measurements of Oliver Christian School Center and Romoland Elementary School were also taken from potential Material Staging Yard 4, given the close proximity of this site to these schools. Oliver Christian School is 0.21 of a mile from material staging yard 4 and Romoland Elementary School is 0.24 of a mile from Material Staging Yard 4.

Sources: Google Earth, Pro, 2012 and 2014; Google Maps, 2013; data compiled by AECOM in 2012, 2013, and 2014.

4.14.1.4 Parks

As discussed in Section 4.15 Recreation, the portions of unincorporated Riverside County crossed by the Proposed Project contain several parks, trails, and recreation facilities. The Proposed Project is also located within 1 mile of a private golf course. Currently Riverside County maintains 35 regional parks and four park and recreation districts. County recreational facilities include ball fields, equestrian facilities, trails, and cultural facilities. Several existing and proposed commercial recreational facilities are located in the county, including golf courses, polo and equestrian centers, and water/amusement parks (Riverside County, 2002). No Federal parks or state recreation areas are within a 1-mile vicinity of the Proposed Project area.

Additionally, the cities within Riverside County maintain approximately 215 parks. Private recreational facilities, such as tennis/basketball courts, pools/spas, and/or playgrounds, can be found primarily in planned communities and apartment complexes. Although approximately 28 public parks or recreational facilities are within 1 mile of the Proposed Project, along with one private recreational facility, only 13 are within 0.5 of a mile of the Proposed Project.

4.14.1.5 Other Public Facilities

Libraries

Riverside County operates a system of 35 libraries and two bookmobiles to serve unincorporated areas (Riverside County, 2008) and some incorporated areas, such as the cities of Menifee, Perris, and Temecula. There are five Riverside County libraries that are located within the vicinity of the Proposed Project: the Romoland Library, approximately 0.18 of a mile from the Proposed Project; the Perris Library, approximately 5.37 miles from the Proposed Project; the Sun City Library located approximately 3.13 miles from the Proposed Project; the Grace Mellman Community Library located approximately 2.59 miles from the Proposed Project; and the Temecula Public Library located approximately 3.1 miles from the Proposed Project.

The City of Murrieta operates one library to serve its residents: the Murrieta Public Library, located approximately 4.34 miles from the Proposed Project.

Hospitals

Riverside County operates one hospital and nine clinics. Additional medical facilities and services, such as private and municipal facilities, are also located in the Proposed Project vicinity. As shown in Figure 4.14-1 Public Services the two hospitals closest to the Proposed Project are Menifee Valley Medical Center and Loma Linda University Medical Center-Murrieta. Menifee Valley Medical Center is a private, 84-bed hospital that serves the medical needs of the City of Menifee and is located less than 2 miles from the Proposed Project. Loma Linda University Medical Center-Murrieta is a full-service hospital with 106 inpatient beds and a 160,000-square foot professional office building and is located less than 3 miles from the Proposed Project. Loma Linda University Medical Center-Murrieta serves the cities of Menifee and Murrieta and the surrounding communities of Temecula, Fallbrook, Winchester, Lake Elsinore, Sun City, Hemet, Perris, Wildomar, and Canyon Lakes (Loma Linda University, 2011).

4.14.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.14.2.1 Federal

There are no federal regulations related to public services that would apply to the Proposed Project.

4.14.2.2 State

California Public Resources Code Sections 4292 and 4293

California Public Resources Code (CPRC) Section 4292 states:

> any person that owns, controls, operates, or maintains any electrical transmission or distribution line shall, during such times and in such areas as are determined to be necessary by the director or the agency, has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightening arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such a pole or tower (CPRC 4292).

CPRC 4293 states:

> any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such area, maintain a clearance of the respective distances which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:
>
> (a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, four feet
>
> (b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, six feet
>
> (c) For any line which is operating at 110,000 or more volts, 10 feet
>
> In every case, such distance shall be sufficiently great to furnish the required clearance at any position of the wire, or conductor when the adjacent air temperature is 120 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard (CPRC 4293).

4.14.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not

have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

Fire policies and regulations that govern unincorporated Riverside County include County Ordinance Number 787, Riverside County Master Fire Protection Plan; California Public Resources Code Section 4290, the Uniform Fire Code; and the Uniform Building Code (UBC). The Riverside County General Plan policies refer to the UBC with respect to various aspects of building code requirements. Riverside County adopted the California Building Code and the International Building Code with respect to overall and/or specific building code issues.

City of Menifee General Plan

The City of Menifee General Plan (adopted on December 20, 2013) does not contain any specific goals or policies related to public services that are relevant to electric utility projects (City of Menifee, 2013a).

City of Murrieta General Plan

The City of Murrieta General Plan (adopted on July 19, 2011) does not contain any specific goals or policies related to public services that are relevant to electric utility projects (City of Murrieta, 2011).

City of Perris General Plan

The Safety Element of the City of Perris' General Plan approved on October 25, 2005) does not contain any specific goals or policies related to public services that are relevant to electric utility projects (City of Perris, 2006).

City of Temecula General Plan

The City of Temecula's General Plan Growth Management/Public Facilities Element (updated in 2005) has adopted goals for its growth management strategy, defining level of service for public facilities. Facilities and services provided in Temecula under the responsibility and authority of the city include the following:

- Fire protection (currently contracted to RCFD)
- Paramedic Emergency Services (currently contracted to RCFD)
- Police/Sheriff (currently contracted to Riverside County Sheriff's Department)
- Civic Center
- Flood Control/Drainage
- Parks and Recreation
- Solid Waste (currently contracted to private companies)

The following goals, defined by the City of Temecula's General Plan Growth Management/Public Facilities Element, are related to ensuring the provision of these services:

- Goal 1 encourages cooperative management of growth among local governments within Riverside County
- Goal 2 enhances the quality of life for Temecula residents through orderly and efficient patterns of growth. (This goal is not directly applicable to the Proposed Project as its focus is residential development and urbanization)
- Goal 3 guides the adequate levels of service provision, including police, fire and emergency services that are essential to the safety of life and property within the Planning Area
- Goal 4 promotes a quality school system with adequate facilities and funding to educate the youth of Temecula
- Goal 5 promotes public and quasi-public facilities and services that provide for the social, cultural, civic, religious, and recreational needs of the community

In addition, the City of Temecula Municipal Code (2014) includes several chapters related to utilities, public services and construction requirements. These include the following:

- Title 8 Health and Safety
- Title 13 Public Services
- Title 15 Buildings and Construction
- Title 18 Construction, Grading and Encroachments

These codes, goals, and policies have been considered and incorporated into the design and implementation of the Proposed Project where appropriate and feasible.

4.14.3 Significance Criteria

The significance criteria for assessing the impacts to public services are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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
- other public facilities

4.14.4 Impact Analysis

4.14.4.1 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?

Construction

Fire Protection

Less Than Significant Impact. Proposed Project construction activities would not require the expansion of RCFD or Murrieta Fire Department fire protection services because of the temporary and short-term nature of construction, which is anticipated to occur over a 16-month period. Although the need for emergency services may occur during the construction phase of the Proposed Project, such a need would not significantly affect the provision of existing emergency services or require the provision of service beyond existing capacities. Construction is not anticipated to affect response times, as any lane or road closures, if necessary, would be temporary and coordinated with the local jurisdiction so as not to cause closure of any emergency access route. Thus, impacts to fire emergency services would be less than significant.

Police Protection

Less Than Significant Impact. The need for law enforcement services during construction would be unlikely, except in the event of an emergency. Material staging yards may be illuminated for security and, if necessary, SCE would hire a local security company to provide 24-hour attendants at the staging and work areas during construction, which would minimize the involvement of local law enforcement. Therefore, the impact would be less than significant.

Schools

Less Than Significant Impact. Construction of the Proposed Project would occur over approximately 16 months and could require a limited amount of accommodations for personnel during construction. Temporary personnel could bring school aged children into the respective school districts within the area of the Proposed Project. The potential temporary increase of school aged children would not significantly affect school enrollment or impact the performance objectives of any local public schools. Therefore, the impact would be less than significant.

Parks

Less Than Significant. Impacts to parks in the area are evaluated in Section 4.15 Recreation. Impacts to recreational facilities were found to be less than significant.

Other Public Facilities

No Impact. Proposed Project construction activities would not require the expansion of, or result

in an adverse impact to, other types of public facilities (e.g. libraries, hospitals, etc.). As discussed in Section 4.13, Population and Housing, the Proposed Project would not result in substantial population growth in the area, thus not creating an increased demand for public facilities.

Operation

Less Than Significant. Operations and Maintenance (O&M) of the Proposed 115 kV subtransmission line and associated components would be controlled remotely through SCE control systems, and manually in the field as required. It would not require dedicated, full-time personnel; therefore, its operation would not significantly affect police and fire protection response times, emergency services, hospitals, schools, and other services, or create higher demand for these public services.

Routine maintenance for the permanent access road would be conducted on an as-needed basis; this includes maintaining one vegetation-free road to facilitate access and for fire prevention. In addition to maintaining a vegetation-free access road, clearances around electrical lines and clearance of brush and weeds around poles, as required by local jurisdictions on fee-owned right-of-way, is necessary for fire protection. Additionally, SCE complies with California Public Resources Code Sections 4292 and 4293 related to vegetation management in transmission line corridors, which results in substantial reductions in fire risk.

The Proposed Project is designed to improve existing and projected electrical capacity in the area and would not induce growth or create a need for additional public services. Because O&M of the Proposed Project would have no growth-inducing impacts (please see Section 4.19, Growth Inducing Impacts, for additional discussion) and would not displace or require the alteration of any facilities where public services are provided, it would not create a need for new schools, hospitals, or fire and law enforcement services. As a result, O&M of the Proposed Project would have a less than significant impact to public services.

Impacts related to parks in the Proposed Project area are evaluated in Section 4.15, Recreation and were found to be less than significant.

4.14.5 Applicant Proposed Measures

Because no significant impacts to public services would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.14.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on

Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

There are six schools located within 1 mile of Segment 1 of the Alternative Project, as shown in Table 4.14-2 Schools Located Within 1 Mile of Segment 1 of the Alternative Project and Figure 4.14-1 Public Services. The Higher Learning Preschool, Kathleen Elliott Equestrian Trainer and Lessons, and Revival Christian Academy would be located closest to Segment 1 of the Alternative Project, although no school facilities would be displaced by Alternative Project infrastructure. Similar to Segment 1 of the Proposed Project, the Alternative Project (Segment 1) would generally follow existing roads and would not induce growth or create the need for new or physically altered public services. The Alternative Project's location would be within the jurisdiction of the same public service providers (fire, police, emergency services, and other public facilities) as Segment 1 of the Proposed Project, and impacts are expected to be less than significant.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of

Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

There are no schools located within 1 mile of Segment 2 of the Alternative Project that have not already been discussed under the Proposed Project. Similar to Segment 2 of the Proposed Project, Segment 2 of the Alternative Project would generally follow existing roads and would not induce growth or create the need for new or physically altered public services. As stated above, the Alternative Project's location would be within the jurisdiction of the same public service providers (fire, police, emergency services, and other public facilities) as Segment 2 of the Proposed Project, and impacts are expected to be less than significant.

Table 4.14-2 Schools Located Within 1 Mile of Segment 1 of the Alternative Project

Number on Map[1]	School Name[2]	School Address	Proximity to Segment 1 of the Alternative Project (Miles)
20	Revival Christian Academy	29220 Scott Road, Menifee, CA 92584	0.05
21	Higher Learning Preschool	29118 Emerald Circle, Menifee, CA 92584	0.1
22	Kathleen Elliott Equestrian Trainer and Lessons	28981 Tulita Lane, Menifee, CA 92584	0.02
23	First Steps Childcare	33565 Azalea Lane, Murrieta, CA 92563	0.72
24	Oak Meadows Elementary	28600 Poinsettia Street, Murrieta, CA 92563	0.39
25	Vista Murrieta High School	28251 Clinton Keith Road, Murrieta, CA 92563	0.5

Notes:

[1] Map numbers correspond to Figure 4.14-1 Public Services.

[2] Public and private schools, daycares, preschools, and colleges/universities

Sources: Google Earth, Pro, 2012 and 2014; Google Maps, 2013; data compiled by AECOM in 2012, 2013 and 2014

4.14.7 References

City of Menifee. 2013a. City of Menifee General Plan. Available: http://cityofmenifee.us/index.aspx?NID=221. Accessed April 2014.

_____. 2013b. City of Menifee General Plan Draft Environmental Impact Report – Section 5.14 Public Services. Available: http://www.cityofmenifee.us/DocumentCenter/View/1114. Accessed May 2014.

City of Murrieta. 2011. City of Murrieta General Plan. Available: http://www.murrieta.org/cityhall/cd/planning/docs/general.asp. Accessed February 2013.

City of Murrieta Fire Department. 2012. Web site. Available: http://www.murrieta.org/services/fire/info/ about.asp. Accessed January 2013.

City of Murrieta Police Department. 2012. Web site. Available: http://www.murrieta.org/services/police/ default.asp. Accessed January 2013.

City of Perris. 2006. General Plan. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed February 2013.

City of Temecula. 2005. City of Temecula General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014

_____. 2014. City of Temecula Municipal Code. Available: http://www.qcode.us/codes/temecula/. Accessed May 2014

City of Temecula Fire Department. 2013. Web site. Available: http://www.cityoftemecula.org/Temecula/Government/Fire/Stations/Station83.htm. Accessed April 2014.

City of Temecula Police Department. 2013. Temecula Police. Web site. Available: https://www.cityoftemecula.org/Temecula/Government/Police/. Accessed April 2014.

Firmes, Rob. Lieutenant, Riverside County Sheriff's Department. September 20, 2012—personal communication regarding Southwest Station and staffing.

Google Earth, Pro. 2012 and 2014.

Google Maps. 2013. Available: http://maps.google.com/. Accessed January 11, 2013.

Loma Linda University. 2011. Loma Linda University Medical Center-Murrieta. Available: http://www.llumcmurrieta.org/. Accessed January 2013.

Riverside County Fire Department (RCFD). 2009. Riverside County Fire Department Strategic Plan 2009-2029. Prepared by Management Partners Incorporated. Available: http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf. Accessed April 2014.

_____. 2011. 2011 Annual Report.

_____. 2013a. Riverside County Fire Department Web site. Available: http://www.rvcfire.org/opencms/about_us/. Accessed January 2013.

Riverside County. 2008. Riverside County General Plan Final Program Environmental Impact Report. Volume I. Available: http://www.rctlma.org/genplan/content/eir/volume1.html. Accessed September 2012.

_____. 2010. 2010 Perris Station Annual Report.

_____. 2013a. Sheriff's Stations. Available: http://www.riversidesheriff.org/ stations/. Accessed January 2013.

_____. 2013b. Perris Sheriff's Station. Available: http://www.riversidesheriff.org/stations/perris.asp. Accessed in January 2013.

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Section 4.15
Recreation

4.15 Recreation

This section describes recreation in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.15.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.15.1.1 Overview of Recreation Areas in the Vicinity of Segments 1 and 2 of the Proposed Project

The portions of unincorporated Riverside County crossed by the Proposed Project contain several parks, trails, and recreation facilities. The Proposed Project is also located within 1 mile of a private golf course. Currently Riverside County maintains 35 regional parks and four park and recreation districts. County recreational facilities include ball fields, equestrian facilities, trails, and cultural facilities. Several existing and proposed commercial recreational facilities are located in the county, including golf courses, polo and equestrian centers, and water/amusement parks (Riverside County, 2002). No federal parks or state recreation areas are within a 1-mile vicinity of the Proposed Project area.

Additionally, the cities within Riverside County maintain approximately 215 parks. Private recreational facilities, such as tennis/basketball courts, pools/spas, and/or playgrounds, can be

found primarily in planned communities and apartment complexes. The locations of parks and recreation facilities near the Proposed Project are shown on Figure 4.15-1 Parks and Recreational Areas. Although approximately 28 public parks or recreational facilities are within 1 mile of the Proposed Project, along with one private recreational facility, only 13 are within 0.5 of a mile of the Proposed Project. Refer to Table 4.15-1 Parks and Recreational Facilities within 1 Mile of the Proposed Project, for more information. Amenities at these recreational facilities are described below, by county and city jurisdiction.

4.15.1.1.1 Riverside County Parks and Facilities

The following is a brief description of the Riverside County regional and community parks located in the vicinity of Segments 1 and 2 of the Proposed Project:

Riverside County Regional Parks

Double Butte County Regional Park consists of a steep, dual-peaked mountain east of the Proposed Project. Much of this feature was the site of a county landfill, which has since been closed. The County Regional Park is 400 to 600 acres and encompasses a limited portion of the larger physical feature of Double Butte Mountain. This former landfill area is currently a non-developed County Regional Park that is closed to the general public (Brewer, 2012). The county intends to establish recreational uses at Double Butte County Park once clean-up and mitigation measures have been completed in connection with the closure of the landfill (Riverside County, 2008a). The western portion of Double Butte Mountain, outside of the County Regional Park area, is currently used for passive recreation, which includes informal rock climbing and bouldering use (Mountain Project, 2012).

Riverside County Community Parks

Willows Park is located at 29750 Willows Avenue in unincorporated Riverside County, east of the City of Murrieta. This park is located east of the Proposed Project area, encompasses 8.5 acres, and includes basketball courts, a baseball field, a playground, gazebos, barbeque area, trails, and a dog park (Riverside County Parks, 2014; Riverside County Economic Development Agency, 2009).

Discovery Park is located at 35100 Willows Avenue (along a natural gas line easement between Willows Avenue and Murrieta Hot Springs Road) in unincorporated Riverside County, east of the City of Murrieta (Riverside County Parks, 2014; Riverside County Economic Development Agency, 2009). This park is located east of the Proposed Project, encompasses approximately 2 acres, and includes a tree house playground and separate playground for tots, basketball courts, a soccer field, gazebos, picnic benches, barbeques, and trails (Riverside County Parks, 2014).

Overlook Park is located at 29655 Joseph Road (along the north end of Joseph Road and behind Nicolas Elementary School) in unincorporated Riverside County, east of the Proposed Project (Riverside County Parks, 2014; Riverside County Economic Development Agency, 2009). This is a passive park that encompasses approximately 3 acres and includes landscaping and benches (Riverside County Parks, 2014).

Table 4.15-1 Parks and Recreational Facilities within 1 Mile of the Proposed Project

Park/ Recreational Facility Name	Description of Park/Recreational Facility	Location	Approximate Size (acres)	Distance from Proposed Project (miles)
Riverside County Parks and Recreational Facilities				
Double Butte County Regional Park	Non-developed County regional park, closed to general public	Grand Avenue and Matthews Road, Winchester	400–600	0.07
Willows Park	Basketball courts, baseball field, playground, gazebos, barbeque area, trails, and dog park	29750 Willows Avenue, Riverside County	8.5	1.00
Discovery Park	Tree house playground and separate playground for tots, basketball courts, soccer field, gazebos, picnic benches, barbeques, and trails	35100 Willows Avenue, Riverside County	2	0.35
Overlook Park	Passive park that includes landscaping and benches	29655 Joseph Road, Riverside County	3	0.31
Joseph Park	Basketball courts, walking paths, and gazebos	Northwest corner of Nicolas Road and Joseph Road, Riverside County	1	0.32
Central Park	Lighted tennis court, sand volleyball court, open fields, a canopy shaded playground, walking paths, benches, and a gazebo	30666 Central Park Drive, Riverside County	5	0.11
Amphitheatre Park	Open grass areas, walking paths, and benches	South side of Willows Avenue along a Sempra gas line easement, Riverside County	2	0.30

Park/ Recreational Facility Name	Description of Park/Recreational Facility	Location	Approximate Size (acres)	Distance from Proposed Project (miles)
City of Menifee Parks and Recreation Facilities				
Heritage Park	Basketball courts, play areas, and picnic areas	McCall Boulevard and Heritage Lake Drive, Menifee	5.5	0.65
Eller Park	Lighted ball field, basketball courts, running/jogging track, playground equipment, and restrooms	25926 Antelope Road, Menifee	5	0.87
Marion V. Ashley Community Center	Gymnasium lighted ball fields, basketball courts, volleyball court, play area, picnic area, fitness trails, and restrooms	25625 Briggs Road, Menifee	12	0.68
City of Murrieta Parks and Recreational Facilities				
Northstar Park	Basketball court, tot lot/playground equipment, open grass areas, barbeques, picnic tables, shelters, restrooms, and water fountains	36728 Pictor Avenue, Murrieta	3	0.64
City of Temecula Parks and Recreation Facilities				
Nicolas Road Park	Basketball court, children's play area, barbeque, picnic tables, and benches	39955 Nicolas Road, Temecula	2.93	0.92
Voorburg Park	Open grass area, barbeque, and picnic tables	39960 Nicolas Road, Temecula	0.75	0.82
Nakayama Park	Basketball court, children's play area, barbeque, picnic tables, and shelters	30592 Nicolas Road, Temecula	0.28	0.31

Park/ Recreational Facility Name	Description of Park/Recreational Facility	Location	Approximate Size (acres)	Distance from Proposed Project (miles)
Riverton Park	Children's play area, barbeque, and picnic tables	30950 Riverton Lane, Temecula	4.94	0.44
Valley-Wide Recreation and Park District Facilities				
Sheffield Park	Ball fields, soccer fields, and fitness trails	Genoa Street and Pourroy Road, Winchester	14	0.85
Emerald Park	Ball field, basketball courts, and a play area	Emerald Drive and Algarve Avenue, Winchester	7	0.75
Primrose Park	Volleyball court, play area, picnic area	Cloche Drive and McCartney Drive, Winchester	3	0.58
Kona Park	Play area	Waimea Way, Winchester	1	0.37
Spencer's Crossing	Play areas, baseball fields, a picnic area, and a soccer field	Thompson Road and Leon Road, Winchester	11.5	0.32
Brookfield Open Space and Brookfield Park	Picnic area, baseball field, fitness trails, basketball courts, a volleyball court, and a play area	Winchester Road and Pourroy Road, Winchester	74	0.91
Leon Park	Picnic area, basketball courts, play areas, and fitness trails	Euclid Loop and Saguaro Drive, Winchester	5	0.05
Avignon Park	Basketball court	Avignon Road and Thompson Road, Winchester	0.5	0.47

Park/ Recreational Facility Name	Description of Park/Recreational Facility	Location	Approximate Size (acres)	Distance from Proposed Project (miles)
Crown Valley Park	Lighted ball fields, soccer fields, basketball courts, tennis courts, and play areas	High Vista Drive and Shadetree Drive, Riverside County	7	0.67
Whispering Heights Park	Play area	Near the intersection of Pat Road and Slough Road, Riverside County	–	0.78
French Valley Streetscapes	Landscaping and open grass area	Near the intersection of Perrine Street and Aaron Road, Riverside County	–	0.17
French Valley Community Center & Park*	Gymnasium, lighted ball fields, basketball courts, play areas, picnic areas, and restrooms	31757 Browning Street, Riverside County	7	0.67
Watermill Park	Open grass areas, walking paths, and benches	Spun Cotton Drive and Round Coral Drive, Winchester	1	0.95

Notes:

*According to the Valley-Wide Park and Recreation District (2014b), the French Valley Community Center and Park is also referred to as the Rancho Bella Vista Community Center and Park.

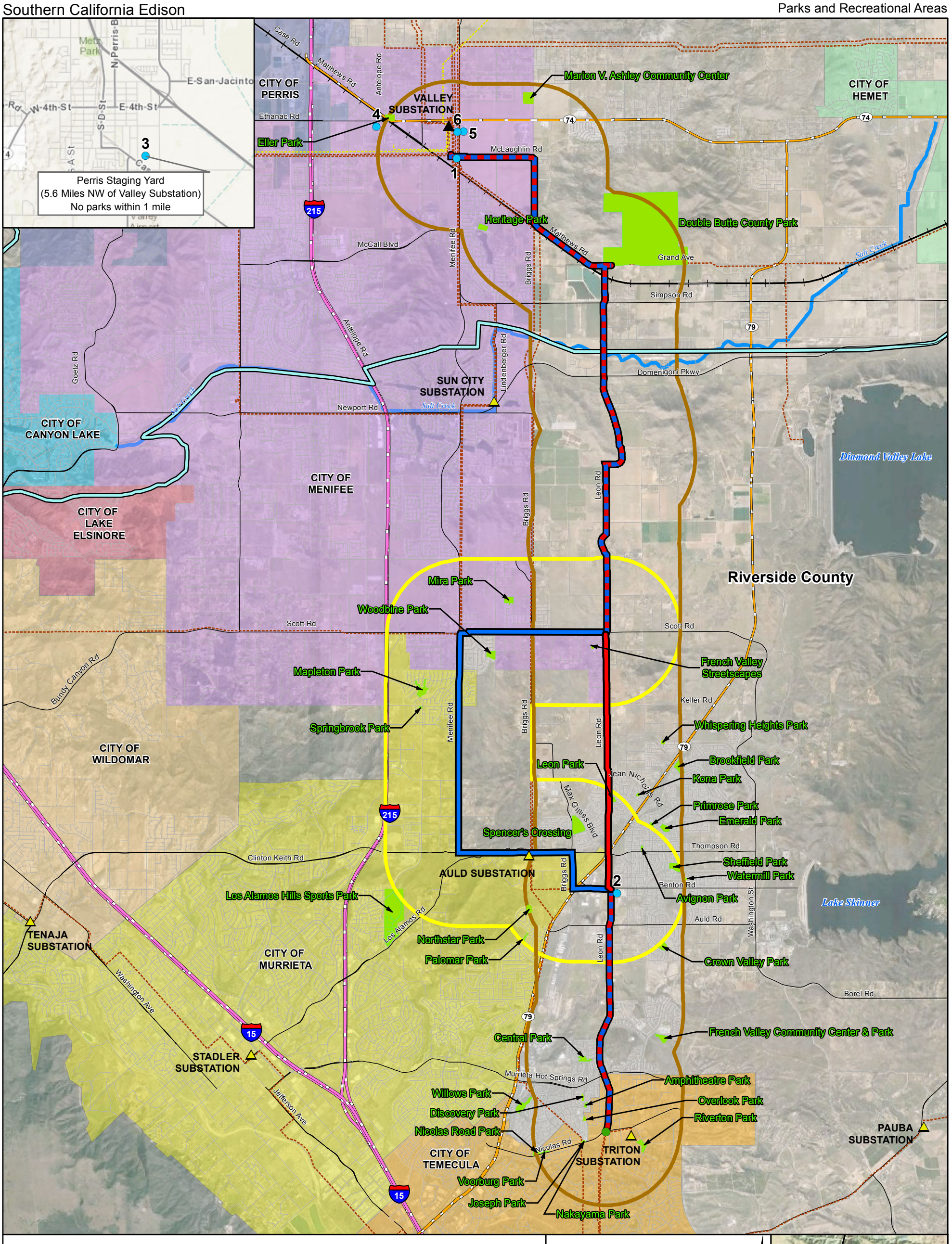
"–" = acreage not available

Sources: Data compiled by AECOM in 2012 and 2014; Google Earth, Pro, 2012 and 2014; Valley-Wide Park and Recreation District, 2012b, 2014a, and 2014b; Riverside County Economic Development Agency, 2009; Riverside County Parks, 2014; City of Murrieta, 2014; Murrieta Patch, 2014; City of Temecula, 2014

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.15-1**

Southern California Edison

Parks and Recreational Areas



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Potential Material Staging Yards
- Staging Yards 1-6

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line
- 1 Mile Distance from Proposed Project
- 1 Mile Distance from Alternative Project

Parks and Recreational Areas
- Parks
- Salt Creek Trail Bikeway System

Sources: SCE, 2014;
Riverside County, 2014;
Aerial Image:
Google Earth Pro, 2014

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Chapter 4

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Joseph Park is located at the northwest corner of Nicolas Road and Joseph Road (generally bounded by an SCE easement between the City of Temecula's Nakayama Park and Riverside County Flood Control bike path) in unincorporated Riverside County, east of the Proposed Project (Riverside County Parks, 2014; Riverside County Economic Development Agency, 2009). This park encompasses approximately 1 acre and includes basketball courts, walking paths, and gazebos (Riverside County Parks, 2014).

Central Park is located at 30666 Central Park Drive located in unincorporated Riverside County between the City of Murrieta and Mount San Jacinto, east of the Proposed Project (Riverside County Parks, 2014; Riverside County Economic Development Agency, 2009). This park encompasses approximately 5 acres and includes a lighted tennis court, a sand volleyball court, open fields, a canopy shaded playground, walking paths, benches, and a gazebo (Riverside County Parks, 2014).

Amphitheatre Park is located on the south side of Willows Avenue along a Sempra gas line easement in unincorporated Riverside County, east of the Proposed Project (Riverside County Economic Development Agency, 2009). This park encompasses approximately 2 acres and includes open grass areas, walking paths, and benches (Google Earth, Pro, 2012 and 2014).

4.15.1.1.2 City of Menifee Parks

Heritage Park is located at McCall Boulevard and Heritage Lake Drive in the northeast area of the City of Menifee, west of the Proposed Project. This park encompasses 5.5 acres and includes basketball courts, play areas, and picnic areas (Valley-Wide Recreation and Park District, 2012a). This park is currently administered by the Valley-Wide Recreation and Park District (City of Menifee, 2014).

Eller Park is located at 25926 Antelope Road in the City of Menifee, northwest of the Proposed Project. This park encompasses 5 acres and includes a lighted ball field, basketball courts, running/jogging track, playground equipment, and restroom facilities (Valley-Wide Recreation and Park District, 2014a). This park is currently administered by the Valley-Wide Recreation and Park District (City of Menifee, 2014).

Marion V. Ashley Community Center is located at 25625 Briggs Road in the City of Menifee, north of the Proposed Project. This center encompasses 12 acres and includes a gymnasium, lighted ball fields, basketball courts, volleyball court, play area, picnic area, fitness trails, and restrooms (Valley-Wide Recreation and Park District, 2014a). This park is currently administered by the Valley-Wide Recreation and Park District (City of Menifee, 2014).

4.15.1.1.3 City of Murrieta Parks

Northstar Park is located at 36728 Pictor Avenue in the City of Murrieta, east of the Proposed Project (Murrieta Patch, 2014). This park encompasses approximately 3 acres and includes a basketball court, tot lot/playground equipment, open grass areas, barbeques, picnic tables, shelters, restrooms, and water fountains (City of Murrieta, 2014; City of Murrieta, 2011b; Google Earth, Pro, 2012 and 2014).

4.15.1.1.4 City of Temecula Parks

The following is a brief description of the City of Temecula parks located in the vicinity of the Proposed Project:

Nicolas Road Park is located at 39955 Nicolas Road in the City of Temecula, southeast of the Proposed Project area (City of Temecula, 2014). This park encompasses 2.93 acres and includes a basketball court, children's play area, barbeques, picnic tables, and benches (City of Temecula, 2014).

Voorburg Park is located at 39960 Nicolas Road in the City of Temecula, southeast of the Proposed Project (City of Temecula, 2014). This park encompasses 0.75 acre and includes an open grass area, barbeques, and picnic tables (City of Temecula, 2014).

Nakayama Park is located at 30592 Nicolas Road in the City of Temecula, southeast of the Proposed Project (City of Temecula, 2014). This park encompasses 0.28 acre and includes a basketball court, a children's play area, barbeques, picnic tables, and shelters (City of Temecula, 2014).

Riverton Park is located at 30950 Riverton Lane in the City of Temecula, southwest of the Proposed Project (City of Temecula, 2014). This park encompasses 4.94 acres and includes a children's play area, barbeques, and picnic tables (City of Temecula, 2014).

4.15.1.1.5 Valley-Wide Recreation and Park District

A number of neighborhood parks located within cities or unincorporated Riverside County communities are operated by the Valley-Wide Recreation and Park District. This district was founded in 1972 as a special district to focus on recreation and parks. The following is a brief description of the Valley-Wide Recreation and Park District's (2012b) parks in unincorporated Riverside County in the vicinity of the Proposed Project area.

Sheffield Park is located at the corner of Genoa Street and Pourroy Road in Winchester, encompasses 14 acres, and includes ball fields, soccer fields, and fitness trails.

Emerald Park is located at the corner of Emerald Drive and Algarve Avenue in Winchester, encompasses 7 acres, and includes a ball field, basketball courts, and a play area.

Primrose Park is located at the corner of Cloche Drive and McCartney Drive in Winchester, encompasses 3 acres, and includes a volleyball court, play area, and picnic area.

Kona Park is located at Waimea Way in Winchester, encompasses 1 acre, and includes a play area.

Spencer's Crossing is located at Thompson Road and Leon Road in Winchester, encompasses 11.5 acres, and includes play areas, baseball fields, restrooms, a picnic area, and a soccer field.

Brookfield Open Space and Brookfield Park are located at Winchester Road and Pourroy Road in Winchester and encompass a total of 74 acres (12 acres for the park and 62 acres for the open

space). The park includes a picnic area, baseball field, fitness trails, basketball courts, a volleyball court, and a play area.

Leon Park is located at the corner of Euclid Loop and Saguaro Drive in Winchester, encompasses 5 acres, and includes a picnic area, basketball courts, play areas, and fitness trails.

Avignon Park is located at the corner of Avignon Road and Thompson Road in Winchester, encompasses 0.5 acre, and includes a basketball court.

Crown Valley Park is located at the corner of High Vista Drive and Shadetree Drive in unincorporated Riverside County, encompasses 7 acres, and includes lighted ball fields, soccer fields, basketball courts, tennis courts, and play areas.

Whispering Heights Park is located near the intersection of Pat Road and Slough Road in unincorporated Riverside County and includes a play area.

French Valley Streetscapes is located near the intersection of Perrine Street and Aaron Road in unincorporated Riverside County, and includes landscaping and open grass areas.

French Valley Community Center & Park (also known as Rancho Bella Vista Community Center & Park) is located at 31757 Browning Street in unincorporated Riverside County, encompasses 7 acres, and includes a gymnasium, lighted ball fields, basketball courts, play areas, picnic areas, and restrooms.

Watermill Park is located at Spun Cotton Drive and Round Coral Drive in Winchester, encompasses 1 acre, and includes open grass areas, walking paths, and benches.

4.15.1.1.6 Other Recreational Areas

One golf course is located in the vicinity of the Proposed Project area. Highland Palms Mobile Homes Golf Course is a private nine-hole golf course located 0.6 of a mile east of the Proposed Project.

4.15.1.1.7 Trails

Riverside County contains multi-purpose trails that accommodate hikers, bicyclists, and equestrian users as an integral part of the county's circulation system. These trails serve both as a means of connecting the unique communities and activity centers throughout the county and as avenues for alternate modes of transportation. In addition to transportation, the trail system also serves as a community amenity by providing recreation and leisure opportunities.

The cities of Murrieta and Temecula also contain multi-purpose trails and bike lanes (Class II bike lanes, which consist of paved bike lanes that follow arterial roadways) that accommodate hikers, bicyclists, and equestrian users as an integral part of the cities' circulation systems (City of Murrieta, 2011a; City of Temecula, 2005).

An existing regional trail runs along Briggs Road and Leon Road to Garbani Road, which would be located within 1 mile and parallel to the Proposed Project. A Class I Bike Path exists from the

intersection of Leon Road and Garbani Road, south to Benton Road; this bike lane runs parallel to the Proposed Project. Also, a Class I Bike Path exists from the southeast corner of Leon Road and Benton Road, south to Murrieta Hot Springs Road; this bike path runs parallel to the Proposed Project. An informal community trail exists from the intersection of Chandler Drive and Murrieta Hot Springs Road, south to Nicolas Road; this informal community trail also runs parallel to the Proposed Project.

Trails that would be crossed by the Proposed Project include the Salt Creek Recreational Trail and levee road, an informal neighborhood walking path parallel to Old Leon Road (referred to as Old Leon Road for purposes of analysis), and a Class II Bike Lane along State Route (SR) 79. The Salt Creek Recreation Trail/levee road parallels Salt Creek (channelized in this area) and is located south of Olive Avenue. The Salt Creek Recreational Trail currently receives minimal use due to the lack of existing development in the area it traverses; however, this trail is categorized as a Class I Bike Path/Regional Trail in the Riverside County General Plan and Harvest Valley/Winchester Area Plan. The walking path parallel to Old Leon Road is paved and portions are landscaped; however, it is not an officially designated trail by the county (Riverside County, 2008b). During a site visit in February 2012, active recreational use of this trail was observed. The Class II Bike Lane is a paved bike lane along SR-79 in the City of Murrieta.

Trails in the vicinity of the Proposed Project area are shown in Figure 4.15-2 Trail Locations.

4.15.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.15.2.1 Federal

There are no federal regulations related to parks and recreational facilities that would apply to the Proposed Project.

4.15.2.2 State

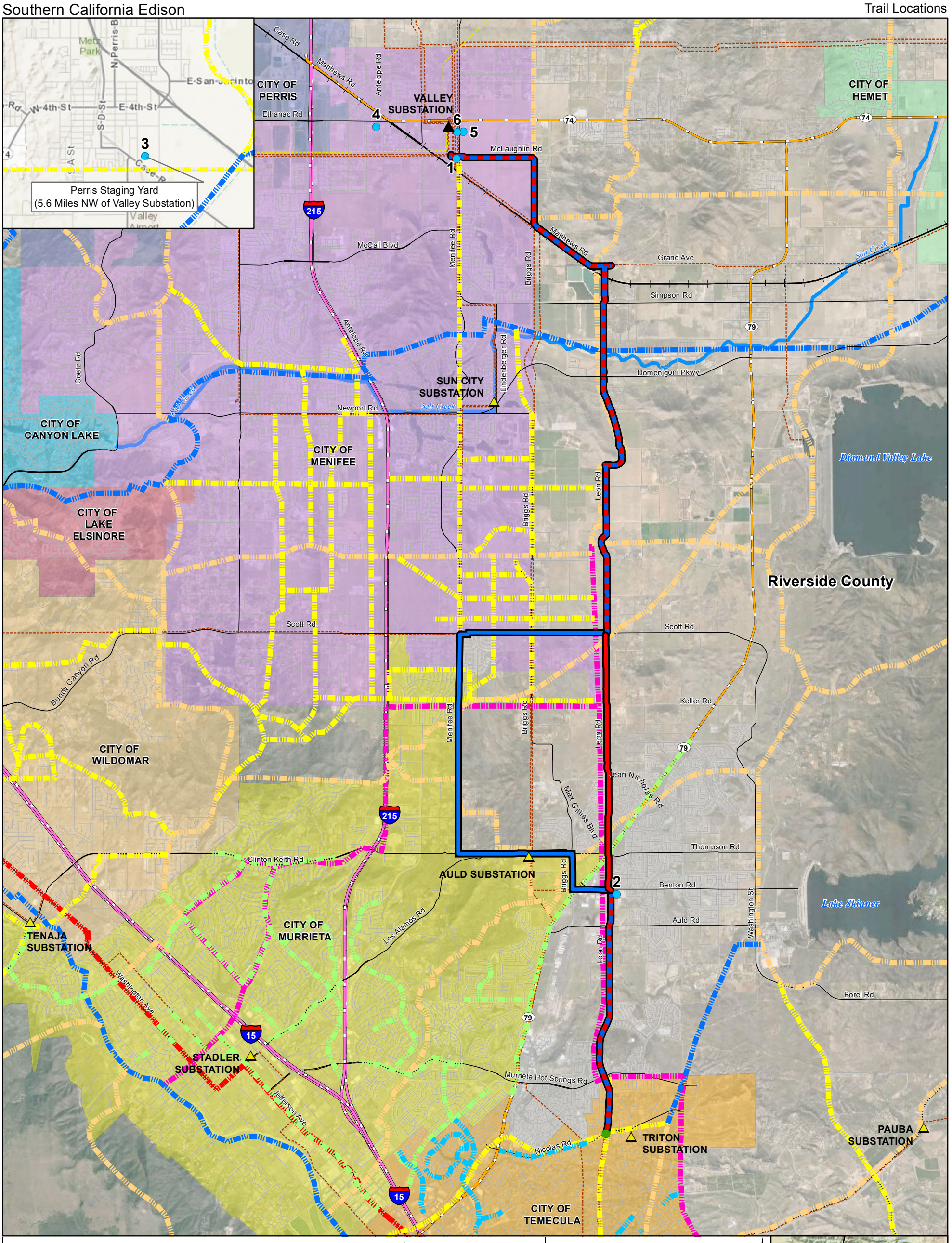
There are no state regulations related to parks and recreational facilities that would apply to the Proposed Project.

4.15.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters."

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.15-2**

Southern California Edison Trail Locations



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Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The following Multipurpose Open Space Element and Land Use Element policies are relevant to the Proposed Project (Riverside County, 2008c):

- Policy OS 20.2: Prevent unnecessary extension of public facilities, services, and utilities for urban uses into Open Space-Conservation designated areas
- Policy OS 20.3: Discourage the absorption of dedicated park lands by non-recreational uses, public or private. Where absorption is unavoidable, replace park lands that are absorbed by other uses with similar or improved facilities and programs
- Policy OS 20.6: Require new development to provide implementation strategies for the funding of both active and passive parks and recreational sites
- Policy LU 19.5: Require that new development meet the parkland requirements as established in the Quimby Act and County enabling ordinances
- Policy LU 5.1: Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, transportation systems, and fire/police/medical services
- Policy LU 8.1: Provide for permanent preservation of open space lands that contain important natural resources, hazards, water features, watercourses, and scenic and recreational values

City of Menifee General Plan

The City of Menifee General Plan was adopted on December 20, 2013 (City of Menifee, 2013). The Open Space and Conservation Element does not contain any specific goals or policies relevant to electric utility projects.

City of Murrieta General Plan

The City of Murrieta General Plan 2035 was adopted on July 19, 2011 (City of Murrieta, 2011a). The Recreation and Open Space Element does not contain any specific goals or policies relevant to electric utility projects.

City of Temecula General Plan

The City of Temecula General Plan was adopted in 1993 and updated in 2005 (City of Temecula, 2005). The Open Space/Conservation Element does not contain any specific goals or policies relevant to electric utility projects.

City of Perris General Plan

The City of Perris General Plan (2006) Open Space Element (approved on March 14, 2006) does not contain any specific goals or policies relevant to electric utility projects (City of Perris, 2006).

4.15.3 Significance Criteria

The significance criteria for assessing the impacts to recreational resources are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA 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

4.15.4 Impact Analysis

4.15.4.1 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

Less Than Significant Impact. Construction would be performed by either SCE construction personnel or contractors. If SCE construction personnel are used they would typically be based at SCE's local facilities, (e.g., service centers, substation, transmission right-of-way) or at one of the six potential temporary material staging yards for the Proposed Project. Contractor construction personnel would be managed by SCE construction management personnel and based out of the contractor's existing yard or potential temporary material staging yard set up for the Proposed Project. SCE anticipates approximately 67 construction personnel working on any given day. SCE anticipates that personnel would work concurrently whenever possible; however, the estimated deployment and number of personnel would vary depending on factors such as material availability, resource availability, and construction scheduling. Construction personnel may occasionally want to sit in a park to eat lunch, but this would be a short-term temporary occurrence, representing only a minor increase in use. Existing parks and recreation facilities within the Proposed Project area have sufficient capacity to accommodate this potential minor increase in use. Therefore, no physical deterioration of recreational amenities would result, and the impact would be a less than significant.

The Proposed Project would run parallel to or cross existing trails, Class I Bike Paths and Class II Bike Lanes, and pedestrian sidewalks, as described in Section 4.15.1, Existing Setting. In areas

where the Proposed Project would run parallel to existing trails, Class I Bike Paths and Class II Bike Lanes, and pedestrian sidewalks, it would not block or hinder the flow of bike or trail traffic during construction. However, the Proposed Project could result in temporary interruption in the flow of traffic where the alignment would cross over existing trails, Class I Bike Paths and Class II Bike Lanes, and pedestrian sidewalks during construction installation. Several stringing (pulling, tensioning, and splicing) sites are proposed where a trail, bike path or bike lane would cross between the poles or under the circuits. This construction activity could have short-term and temporary effects on the flow of bike or trail traffic. Because construction work would be of limited duration, effects on trails would be temporary and would not cause substantial deterioration. SCE would implement Applicant Proposed Measure TRA-1 to reduce potential impacts related to Class I Bike Paths, Class II Bike Lanes, pedestrian sidewalks, and trails; therefore, the impacts would be less than significant.

Operation

Less Than Significant Impact. Operations and Maintenance (O&M) of the Proposed Project would not introduce new population in the area that would increase the use of any existing recreational facilities. The Proposed 115 kV subtransmission and associated components and the reconductored Valley-Auld-Triton 115 kV Subtransmission Line would be controlled remotely through SCE control systems and manually in the field as required. Maintenance personnel who might visit the route from time-to-time may want to occasionally sit in a park to eat lunch, but this is likely to be infrequent and would not represent a notable increase in user population. Therefore, no physical deterioration of recreational amenities would result, and the impact would be less than significant.

O&M of the Proposed Project would not block or hinder the flow of traffic along existing trails. Subtransmission lines are generally compatible with trails because the components would be located at an elevated height that does not interfere with ground activities such as trail use. Where the Proposed Project would cross over the top of trails, bike paths and lanes, pedestrians and bicyclists would be able to pass between the poles and underneath the circuits. No physical barriers would prevent access and movement along these trails, bike paths, and lanes. Thus, the impact to these recreational amenities would be less than significant.

4.15.4.2 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

No Impact. The Proposed Project would involve constructing a Proposed 115 kV subtransmission line and associated components, removal and reconfiguration of existing pole structures, modifications to the existing Valley 500/115 kV Substation, and reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Construction of the Proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. Project activities would not induce population growth that would lead to substantial increases in the use of or demand for recreational facilities (see Section

4.13, Population and Housing, for additional discussion). Therefore, the Proposed Project would not require the construction or expansion of recreational facilities and no impact would occur.

Operation

No Impact. O&M of the Proposed 115 kV subtransmission line and associated components and reconductored Valley-Auld-Triton 115 kV Subtransmission Line would be controlled remotely through SCE control systems, and manually in the field, as required. As such, the Proposed Project would not introduce a new population of employees into the area that would require construction of new, and expansion of the existing, recreational facilities. Therefore, no impacts to recreation facilities would result.

4.15.5 Applicant Proposed Measures

Because no significant impacts to recreation resources would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.15.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

The following is a brief description of park and recreational facilities located within 1 mile of Segment 1 of the Alternative Project, also shown in Figure 4.15-1 Parks and Recreational Areas.

Mapleton Park is located at the corner of Poinsettia Street and Daffodil Way in Murrieta, encompasses 9.3 acres, and includes a bike path/walking trail, barbeque pits, an open grass area, picnic tables, a play area, a multi-purpose trail, a basketball court, a soccer field, a softball field, and a volleyball court.

Woodbine Park is located at the corner of Woodbine Lane and Lindenberger Road in Menifee, encompasses 5 acres, and includes a soccer field, basketballs courts, and play areas.

Spencer's Crossing is located at Thompson Road and Leon Road in Winchester, encompasses 11.5 acres, and includes play areas, baseball fields, a picnic area, and a soccer field.

Mira Park is located at the corner of Mira Street and Wickerd Road in Menifee, encompasses 5 acres, and includes a baseball field, a picnic area, basketball courts, and a play area.

Los Alamos Hills Sports Park is located at the corner of Ruth Ellen Way and Springhaven Street and is the City of Murrieta's only city-wide park and encompasses 45 acres of parkland. This park includes barbeques, a bike path/walking trail, an open grass area, picnic tables, shelters, play areas, baseball fields, concession building, football fields, and soccer fields.

A neighborhood park is being planned in the Golden City Specific Plan, encompassing 11.6 acres, located at the southeast corner of Baxter Road and Whitewood Road (City of Murrieta, 2011a). As this neighborhood park has not yet been built, it is not included in Figure 4.15-1, Parks and Recreational Areas; however, this park is included in Section 4.18, Cumulative Analysis, of this PEA. Mapleton Trail (a community trail) begins near the intersection of Petunia Street and Summersweet Place, south of Keller Road. This 1-mile-long trail in the City of Murrieta consists of decomposed granite and is situated at the same location where an existing 115 kV subtransmission line is located. Segment 1 of the Alternative Project would be double-circuited along the same route as the existing 115 kV subtransmission line.

Segment 1 of the Alternative Project would have a setting similar to that of Segment 1 of the Proposed Project and would be similar in scope. None of the construction or O&M activities would be conducted within the existing parks identified; however, construction activity along Mapleton Trail could have short-term and temporary effects on the flow of bike or trail traffic. Because of the limited duration of construction work, effects on trails would be temporary and

would not cause substantial deterioration. Therefore, impacts are expected to be less than significant.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

The following is a brief description of park and recreational facilities within 1 mile of the Segment 2 of the Alternative Project, also shown in Figure 4.15-1 Parks and Recreational Areas.

Palomar Park is located at 29750 Via Mira Mosa in the City of Murrieta, encompasses 4 acres, and includes a tot lot, an open grass area, picnic tables, shelters, and water fountains (My Murrieta, 2014).

There is also a Class II bike lane located along SR-79 in the City of Murrieta that Segment 2 of the Alternative Project would cross (City of Murrieta, 2011a), as shown in Figure 4.15-2 Trail Locations.

Segment 2 of the Alternative Project would have a setting similar to that of Segment 2 of the Proposed Project and would be similar in scope. None of the construction or O&M activities would be conducted within the existing parks identified; however, construction activity along the Class II bike lane along SR-79 in the City of Murrieta could have short-term and temporary effects on the flow of bike or trail traffic. Because of the limited duration of construction work, effects on trails would be temporary and would not cause substantial deterioration. Therefore, impacts are expected to be less than significant.

4.15.7 References

Brewer, Marc. Senior Park Planner. Riverside County Parks. October 11, 2012—e-mail communication with Sarah Sullivan, Air Quality Specialist with AECOM regarding Double Butte.

City of Menifee. 2013. City of Menifee General Plan. Available: http://cityofmenifee.us/index.aspx?NID=221. Accessed April 2014.

_____. 2014. City of Menifee Area Parks. Available: http://ca-menifee.civicplus.com/index.aspx?nid=134. Accessed April 2014.

City of Murrieta. 2011a. General Plan 2035. Available: http://www.murrieta.org/cityhall/cd/planning/docs/general.asp. Accessed February 12, 2013.

_____. 2011b. City of Murrieta General Plan 2035 – Recreation and Open Space Element. Available: http://www.murrieta.org/cityhall/cd/planning/general.asp. Accessed: April 2014.

_____. 2014. Parks Map. Available: http://www.murrieta.org/services/cs/parks.asp. Accessed April 2014.

City of Perris. 2006. General Plan. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed February 12, 2013.

City of Temecula. 2005. General Plan. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014.

_____. 2014. Parks Map. Available: http://www.cityoftemecula.org/Temecula/Residents/ParksFacilities/Parks/ParksAndFacilities.htm. Accessed April 2014.

Google Earth, Pro, 2012 and 2014. Location and Distance Verification. Available: earth.google.com

Mountain Project. 2012. Double Butte Mountain. Available: http://www.mountainproject.com/v/double-butte-mountain/107076074. Accessed December 31, 2012.

Murrieta Patch. 2014. Listings - Northstar Park Webpage. Available: http://murrieta.patch.com/listings/northstar-park. Accessed April 2014.

My Murrieta. 2014. Palomar Park Webpage. Available: http://www.mymurrieta.com/parks/34. Accessed April 2014.

Riverside County. 2002. *General Plan Final Program Environmental Impact Report*. Volume I. Available: http://www.rctlma.org/genplan/content/eir/volume1.html#4.14. Accessed July 18, 2012.

_____. 2008a. *Riverside County General Plan Harvest Valley/Winchester Area Plan*. Available: http://www.rctlma.org/genplan/general_plan_2008/area_plan_vol_1/Harvest_Valley_Winchester_Area_Plan_2008.pdf. Accessed July 19, 2012.

_____. 2008b. *Riverside County General Plan, Southwest Area Plan*. Available: http://www.rctlma.org/genplan/general_plan_2008/area_plan_vol_1/Southwest_Area_Plan_2008.pdf. Accessed July 19, 2012.

_____. 2008c. Riverside County *General Plan–2008 Update, Multipurpose Open Space Element*.

Riverside County Parks. 2014. Riverside County Parks Webpage. Available: http://www.rivcoparks.org/?s=temecula. Accessed April 2014.

Riverside County Economic Development Agency. 2009. Submittal to the Board of Supervisors – Agreement for Landscape Architectural Services by and Between Riverside County and Alhambra Group for the Silverhawk Parks Rehabilitation Project . Available: http://www.clerkoftheboard.co.riverside.ca.us/agendas/2009/06_23_09/03.30.pdf. Accessed: April 2014.

Valley-Wide Recreation and Park District. 2012a. Heritage Park. Available: http://www.vwrpd.org/recreation-facilities-hemet.cfm. Accessed July 19, 2012.

_____. 2012b. Parks at a Glance. Available: http://www.vwrpd.org/recreation-facilities-hemet.cfm. Accessed December 10, 2012.

_____. 2014a. Facility Information. Available: http://www.vwrpd.org/recreation-facilities-hemet.cfm. Accessed April 2014.

_____. 2014b. Personal communication with Valley-Wide Recreation and Park District Operator and Hallie Fitzpatrick of AECOM. April 29, 2014.

Section 4.16
Transportation and Traffic

4.16 Transportation and Traffic

This section describes the transportation and traffic in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.16.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

Regional and local roadway networks, existing levels of service (LOS), and public transportation for the Proposed Project area are described in the following subsections.

4.16.1.1 Regional Roadways

Regional access to the Proposed Project area is provided by Interstate 15 (I-15), Interstate 215 (I-215), State Route (SR) 74, and SR-79.

I-15 is eight lanes wide and located west of the Proposed Project area. I-15 joins I-215 in the City of Murrieta and continues south into San Diego County. Freeway interchanges near the Proposed Project area include those at SR-79 and I-215. According to traffic counts conducted by the California Department of Transportation (Caltrans), I-15 carries approximately 163,000 average daily trips near the Proposed Project (Caltrans, 2012).

I-215 is a north-south freeway with four travel lanes, located west of the Proposed Project. I-215 joins I-15 in the City of Murrieta and continues north through the City of Menifee and the communities of Sun City, Romoland, Winchester, and Homeland. Freeway interchanges near the Proposed Project include those at Ethanac Road, McCall Boulevard, and Newport Road. According to traffic counts conducted by Caltrans, I-215 carries approximately 77,000 average daily vehicle trips near the Proposed Project (Caltrans, 2012).

SR-74 is four lanes wide and traverses in an east-west direction. SR-74 merges with SR-79 northeast of the Proposed Project, while the roadway parallels Matthews Road until it merges with I-215 northwest of the Proposed Project. According to traffic counts conducted by Caltrans, SR-74 carries approximately 32,000 average daily vehicle trips near the Proposed Project (Caltrans, 2012).

SR-79, also known as Winchester Road, is located east of Segment 1 of the Proposed Project and west of Segment 2 of the Proposed Project for a majority of the route. In the southerly portion of Segment 1 of the Proposed Project (near the intersection of Leon Road and Thompson Road), the Proposed 115 kV subtransmission line traverses the two lane road in a north-south direction. According to traffic counts conducted by Caltrans, SR-79 carries approximately 8,300 average daily vehicle trips near the Proposed Project (Caltrans, 2012).

4.16.1.2 Local Roadways

As described in Section 3.7.1.3, Access Roads and/or Spur Roads, for construction of the Proposed Project, SCE would utilize a combination of through roads and spur roads that would be accessed from a network of existing paved and unpaved public and private roads. For Segment 1 of the Proposed Project, SCE would also use and maintain one existing permanent unpaved access road 400 feet in length on the easterly side of Leon Road starting approximately 300 feet south of Craig Road. Access that would be used for construction purposes would be utilized for Operations and Maintenance (O&M) as well. For Segment 2 of the Proposed Project, there are no new access roads anticipated. SCE would utilize existing access roads for the reconductor portion of the Proposed Project.

The local roadways that provide access and would be utilized for the Proposed Project include Holland Road, Penny Cress Lane, Max Gillis Boulevard, Simpson Road, Scott Road, Briggs Road, Grand Avenue, Benton Road, Menifee Road, Matthews Road, Case Road, Leon Road, Thompson Road, Nicolas Road, Murrieta Hot Springs Road, Auld Road, Ethanac Road, Antelope Road, Newport Road/Domenigoni Parkway, and a private road (SCE access road/farm road) between Menifee Road and Briggs Road. Table 4.16-1 Characteristics of Roadways in the Proposed Project Area provides classification and traffic volume data for a majority of the local and regional roadways discussed. However, traffic count data is not available for Max Gillis Boulevard, McLaughlin Road, Case Road, Grand Avenue, Benton Road, Auld Road, Penny Cress Lane and/or the private road between Menifee Road and Briggs Road.

Table 4.16-1 Characteristics of Roadways in the Proposed Project Area

Name	Classification	Lanes	Average Daily Traffic Volumes
Regional Roadways			
I-15	Freeway	8	163,000
I-215	Freeway	4	77,000
SR-74	Arterial	4	32,000
SR-79	Arterial	2	8,300
Local Roadways			
Briggs Road	Arterial	2	4,190
Menifee Road	Urban Arterial	2	9,030
Matthews Road	Collector	2	4,380
Leon Road	Arterial	2	6,200
Simpson Road	Arterial	2	5,220
Thompson Road	Arterial	2-4	4,500
Scott Road	Arterial	2-4	10,730
Holland Road	Collector	2-4	4,220
Antelope Road	Collector	2-4	8,750
Ethanac Road	Collector	2	5,536
Nicolas Road	Arterial	4	7,530
Murrieta Hot Springs Road	Arterial	4	29,350
Newport Road/Domenigoni Parkway	Urban arterial	6	20,230
Sources: Caltrans, 2012; Riverside County Transportation Department, 2012a; City of Temecula, 2005			

For purposes of this analysis only, the portion of Leon Road that runs just south of Lantana Way and Benton Road is referred to as Old Leon Road. Leon Road is a two-lane arterial, with most portions paved. Old Leon Road is unpaved from the intersection of SR-79 and Thompson Road to Benton Road. The roadway generally has no curb, gutter, or sidewalk, except within more developed areas.

4.16.1.3 Existing Levels of Service

Operation of the roadway system is typically described in terms of LOS. LOS is a quantitative indication of the level of delay and congestion experienced by motorists. LOS is designated by the letters A through F, with "A" corresponding to the lowest levels of congestion and "F" corresponding to the highest level of congestion. Table 4.16-2 Level of Service Criteria for Roadways presents two-way roadway traffic volume thresholds for LOS "C" through "E" based on the classification of the roadway. The classification of each roadway within the Proposed Project area can be found in Table 4.16-1 Characteristics of Roadways in the Proposed Project Area.

Table 4.16-2 Level of Service Criteria for Roadways

Roadway Classification	Number of Lanes	Maximum Two-Way Traffic Volume[1]		
		Service Level C	Service Level D	Service Level E
Collector	2	10,400	11,700	13,000
Arterial	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Freeway	4	61,200	68,900	76,500
Freeway	8	128,400	144,500	160,500

Note:
[1] The data provided by Riverside County did not include daily volume thresholds for Level of Service A or B.
Source: Riverside County, 2008a

The LOS methodology used to analyze the operational conditions of the roadway segments examined the average daily traffic volumes as compared to the daily traffic volume capacity of the roadway facility. Table 4.16-3 Existing Traffic Operations includes a summary of the operational assessment of regional and local roadways.

Table 4.16-3 Existing Traffic Operations

Roadway	Average Daily Traffic Volume	Roadway Capacity	Volume-to-Capacity Ratio	Level of Service
I-15	163,000	160,500	1.02	LOS F
I-215	77,000	76,500	1.01	LOS F

Roadway	Average Daily Traffic Volume	Roadway Capacity	Volume-to-Capacity Ratio	Level of Service
SR-74	32,000	35,900	0.89	LOS D
SR-79	8,300	18,000	0.46	LOS B or better[1]
Briggs Road	4,190	18,000	0.23	LOS B or better[1]
Menifee Road	9,030	18,000	0.50	LOS B or better[1]
Matthews Road	4,380	13,000	0.34	LOS B or better[1]
Leon Road	6,200	18,000	0.34	LOS B or better[1]
Simpson Road	5,220	18,000	0.29	LOS B or better[1]
Thompson Road	4,500	18,000	0.25	LOS B or better[1]
Scott Road	10,730	18,000	0.60	LOS B or better[1]
Holland Road	4,220	13,000	0.32	LOS B or better[1]
Antelope Road	8,750	13,000	0.67	LOS B or better[1]
Ethanac Road	5,536	13,000	0.42	LOS B or better[1]
Nicolas Road	7,530	35,900	0.21	LOS B or better[1]
Murrieta Hot Springs Road	29,350	35,900	0.82	LOS D
Newport Road/Domenigoni Parkway	20,230	53,900	0.38	LOS B or better[1]

Note:

[1] The data provided by Riverside County did not include daily volume thresholds for Level of Service A or B.

Sources: Riverside County, 2008a; Caltrans, 2012; Riverside County Transportation Department, 2012a; City of Temecula, 2005

All county roadways operate acceptably, while I-215 and I-15 are the only Caltrans facilities operating at an unacceptable LOS.

4.16.1.4 Truck Routes

The designated truck routes within the Proposed Project area include I-215, I-15, SR-74, and SR-79 (Meyer, Mohaddes Associates, 2005).

4.16.1.5 Bikeways, Trails and Pedestrian Facilities

Bikeways near the Proposed Project are classified as Class I (Bike Paths), Class II (Bike Lanes), and Class III (Bike Routes). Bikeway classifications are defined as follows:

- Class I (Bike Paths): Trails used exclusively for non-motorized access and typically shared with pedestrians
- Class II (Bike Lanes): Marked lanes on roadways for exclusive use by bicyclists
- Class III (Bike Routes): Roadways in which bicyclists and motorists share the travel lane

Riverside County contains multi-purpose trails that accommodate hikers, bicyclists, and equestrian users as an integral part of the county's circulation system. These trails serve both as a means of connecting the unique communities and activity centers throughout the county and as avenues for alternate modes of transportation. In addition to transportation, the trail system also serves as a community amenity by providing recreation and leisure opportunities.

The cities of Murrieta and Temecula also contain multi-purpose trails and Class II Bike Lanes that accommodate hikers, bicyclists, and equestrian users as an integral part of the cities' circulation systems (City of Murrieta, 2011; City of Temecula, 2005).

An existing regional trail runs along Briggs Road and Leon Road to Garbani Road, which would be located within 1 mile and parallel to Segment 1 of the Proposed Project. A Class I Bike Path exists from the intersection of Leon Road and Garbani Road, south to Benton Road; this bike lane runs parallel to Segment 1 of the Proposed Project. Also, a Class I Bike Path exists from the southeast corner of Leon Road and Benton Road, south to Murrieta Hot Springs Road; this bike path runs parallel to Segment 2 of the Proposed Project. An informal community trail exists from the intersection of Chandler Drive and Murrieta Hot Springs Road, south to Nicolas Road; this informal community trail also runs parallel to Segment 2 of the Proposed Project.

Trails that would be crossed by the Proposed Project include the Salt Creek Recreational Trail and levee road, an informal neighborhood walking path parallel to Old Leon Road, and a Class II Bike Lane along SR-79. The Salt Creek Recreation Trail/levee road parallels Salt Creek (channelized in this area) and is located south of Olive Avenue. The Salt Creek Recreational Trail currently receives minimal use due to the lack of existing development in the area it traverses; however, this trail is categorized as a Class I Bike Path/Regional Trail in the Riverside County General Plan and Harvest Valley/Winchester Area Plan. The walking path parallel to Old Leon Road is paved and portions are landscaped; however it is not an officially designated trail by the county (Riverside County, 2008b). During a site visit in February 2012, active recreational use of this trail was observed. The Class II Bike Lane is a paved bike lane along SR-79 in the City of Murrieta.

There are existing pedestrian sidewalks located within the Proposed Project area. The Proposed Project would cross existing sidewalks along Leon Road south of Baxter Road. In addition, Segment 2 of the Proposed Project would cross existing sidewalks along the north side of Murrieta Hot Springs Road at Leon Road and the north and south sides of Nicolas Road at Leon Road.

See Section 4.15, Recreation, for more information on bikeway systems, trails, and pedestrian facilities.

4.16.1.6 Transit Service

The Riverside Transit Agency (RTA) provides transit services to western Riverside County. Bus routes 19, 27, 30, and 74 utilize SR-74 within the City of Perris. No other bus routes were identified in the Proposed Project area (RTA, 2012).

4.16.1.7 Rail Service

The Burlington Northern Santa Fe Railroad runs through the City of Menifee and Riverside County along Matthews Road. This railroad line provides freight transport service between the Hemet/San Jacinto area, March Inland Port, and major markets in California and other destinations north and east (City of Hemet, 2012).

4.16.1.8 Air Traffic

One public airport, two private airstrips, and one private helipad were identified within 2 miles of the Proposed Project.

- French Valley Airport is a publically owned airport located approximately 0.45 of a mile west of Segment 2 of the Proposed Project
- Pines Airpark is a privately owned airstrip located approximately 0.55 of a mile east of Segment 1 of the Proposed Project (Leon Road and Loretta Road)
- Perris Valley Airport is a privately owned airstrip located approximately 0.12 of a mile south of Material Staging Yard 3
- SCE Menifee Service Center Helipad is a privately owned helipad located approximately 0.18 of a mile east of SCE's existing Valley 500/115 kV Substation

4.16.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.16.2.1 Federal

Federal Aviation Administration

Under Federal Aviation Administration (FAA) Title 14 Code of Federal Regulations (CFR), Part 77, Objects Affecting Navigable Airspace, Section 13(2)i requires an applicant to notify the FAA of the construction of structures within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet. Title 14, Part 17, Section 17 requires an applicant to submit a Notice of Proposed Construction or Alteration (FAA Form No. 7460-1) to the FAA for construction within 20,000 feet of the nearest runway of an airport with at least

one runway longer than 3,200 feet. Title 14 CFR 77.21, 77.23, and 77.25 outline the criteria used by the FAA to determine whether an obstruction would create an air navigation conflict. SCE would be required to file a Notice of Proposed Construction or Alteration with the FAA as the French Valley Airport is located less than one mile from the Proposed Project and the runway is longer than 3,200 feet. This requirement also is discussed in Section 4.8, Hazards and Hazardous Materials.

Hazardous Materials Transportation Act of 1974

The Federal Hazardous Materials Regulations (49 U.S.C. § 1501 et seq.) identify the required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations applicable to the shipment and transportation of hazardous materials.

4.16.2.2 State

California Department of Transportation

The California Department of Transportation ("Caltrans") manages state highways in California. Caltrans has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code, and to issue encroachment permits for the use of California state highways for purposes other than normal transportation.

Caltrans prepares various planning documents for its transportation facilities throughout the state. The goals established for specific highways are documented in transportation concept reports (TCR). A TCR is a system planning document and tool that also includes an analysis of a transportation corridor. The TCR establishes a 20-year transportation planning concept that is consistent with Caltrans's goals as set forth in the District System Management Plan. The TCR also establishes the future concept of LOS for segments along the route and broadly identifies the nature and extent of the improvements needed to attain a LOS. Operating conditions for each corridor are projected for 10 and 20-year horizons. Beyond the 20-year planning period, the TCR identifies the Ultimate Transportation Corridor, to ensure that adequate right-of-way (ROW) is preserved for future transportation facility projects.

The SR-74 Transportation Concept Report (Caltrans, 1985) contains the 20-year improvement concept for SR-74. The concept presented for the section between I-215 and SR-79 is to maintain the existing four-lane conventional highway. The concept LOS is D for SR-74 near the Proposed Project area.

The SR-79 Transportation Concept Report (Caltrans, 1999a) identifies the 20-year concept for the corridor as a six-lane expressway. The SR-79 realignment project currently is underway, and is intended to realign SR-79 between Domenigoni Parkway and Gilman Springs Road. The concept LOS is E for SR-79 near the Proposed Project area.

The I-215 Transportation Concept Report (Caltrans, 1999b) identifies the envisioned concept for the corridor as a ten-lane freeway with eight mixed-flow lanes and two high occupancy vehicle (HOV) lanes. Caltrans has established a concept LOS of D near the Proposed Project area.

The Route Concept Fact Sheet I-15 (Caltrans, 1999c) identifies the 20-year concept for the corridor as a ten-lane freeway with eight mixed-flow lanes and two HOV lanes. Caltrans has established a concept LOS of E near the Proposed Project area.

California Inter-Utility Coordinating Committee

For any Proposed Project construction activities within a local public ROW, the use of a traffic control service and any lane closures would be conducted in accordance with applicable laws and permit conditions. These traffic control measures would be consistent with those published in the California Joint Utility Traffic Control Manual (CJUTCM) (California Inter-Utility Coordinating Committee, 2010).

4.16.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County Ordinance No. 499

Ordinance No. 499 gives the Riverside County Transportation Department the authority to require that permits be obtained for any type of work conducted within a County road ROW, which in many cases extends beyond the paved road to the adjacent private property boundary. This requirement extends to excavation, placement of structures, and any other work within the County road ROW (Riverside County Transportation Department, 2012b).

Riverside County General Plan

The transportation policy in the Riverside County General Plan, Circulation Element (Riverside County, 2008a) is as follows:

- Policy C 2.1 Maintain the following countywide target Levels of Service:
  - LOS "C" along all County-maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections
  - LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities

- Policy C 4.1 Provide facilities for the safe movement of pedestrians within developments, as specified in the County Ordinances Regulating the Division of Land of Riverside County
- Policy C 17.1 Establish and protect, in conjunction with the County Regional Parks and Open Space District, an enjoyable, efficient and safe recreational trail system comprised of Class I Bike Path/Regional Trail (Combination Trail), Regional and Community hiking and riding trails
- Policy C 18.6 Consider bicycle transportation needs in the review of development projects, and where appropriate, require the provision of bicycle access between a proposed development and other parts of the County through dedication of easements and construction of bicycle access ways

City of Menifee General Plan

The City of Menifee General Plan was adopted on December 20, 2013 (City of Menifee, 2013). Relevant goals and policies listed in the City of Menifee General Plan Circulation Element include the following:

- Policy C-1.1: Require roadways to:
  - Comply with federal, state and local design and safety standards
  - Meet the needs of multiple transportation modes and users
  - Be compatible with the streetscape and surrounding land uses
  - Be maintained in accordance with best practices
- Policy C-1.2: Require development to mitigate its traffic impacts and achieve a peak hour Level of Service (LOS) D or better at intersections, except at constrained intersections at close proximity to the I-215 where LOS E may be permitted
- Policy C-1.5: Minimize idling times and vehicle miles traveled to conserve resources, protect air quality, and limit greenhouse gas emissions

City of Murrieta General Plan

The City of Murrieta General Plan 2035 was adopted on July 19, 2011 (City of Murrieta, 2011). Relevant goals and policies listed in the City of Murrieta General Plan Circulation Element include the following:

- CIR – 1.2 Maintain a Level of Service "D" or better at all intersections during peak hours. Maintain a Level of Service "E" or better at freeway interchanges during peak hours

City of Perris General Plan

Material Staging Yard 3 is located within the City of Perris. The City of Perris updated six of the seven mandatory General Plan Elements in 2005-2006, including the Circulation Element (City of Perris, 2012). Relevant transportation policies listed in the City of Perris General Plan Circulation Element include the following:

- Policy II.A: Maintain the following target Levels of Service:
  - LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 freeway ramps
  - LOS "E" may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations

- Policy I.C: Cooperate with local, regional, state and federal agencies to establish an efficient multi-modal circulation system
- Policy I.D: Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation
- Policy IV.A: Provide non-motorized alternatives for commuter travel as well as recreational opportunities that maximize safety and minimize potential conflicts with pedestrians and motor vehicles

City of Temecula General Plan

The City of Temecula General Plan was updated in 2005 (adopted in 1993). Relevant goals and policies listed in the City of Temecula General Plan Circulation Element include the following:

- Goal 1: Maintain a Level of Service "D" or better at all intersections during peak hours. Maintain a Level of Service "E" or better at freeway interchanges during peak hours. Maintain a Level of Service "C" or better at all intersections during off-peak hours

Riverside County Congestion Management Plan

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including Riverside, to prepare a Congestion Management Plan (CMP). The Riverside County CMP, which was prepared by the Riverside County Transportation Commission (RCTC) in consultation with the County and the cities in Riverside County, is an effort to more directly align land use, transportation, and air quality management efforts, to promote reasonable growth management programs that effectively use statewide transportation funds, while ensuring that new development pays its fair share of needed transportation improvements.

The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by RCTC to evaluate the condition of the Congestion Management System (CMS) as well as meet other monitoring requirements at the state and federal levels. Per the adopted LOS standard of "E," when a CMS segment falls to "F," a deficiency plan is required. Preparation of a deficiency plan is the responsibility of the local agency where the deficiency is located. Other agencies identified as contributors to the deficiency also are required to coordinate with the development of the plan. The plan must

contain mitigation measures, including Transportation Demand Management (TDM) strategies and transit alternatives, and a schedule for mitigating the deficiency. To ensure that the CMS is appropriately monitored to reduce the occurrence of CMP deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMS.

4.16.3 Significance Criteria

The significance criteria for assessing the impacts to transportation and traffic are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
- 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
- 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
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

4.16.4 Impact Analysis

4.16.4.1 Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Construction

Less Than Significant Impact. Construction of the Proposed Project would occur over approximately 16 months. Construction traffic to and from the Proposed Project would include vehicles transporting construction personnel and equipment. Based on the anticipated construction schedule, the maximum number of construction personnel that would be required on

a single day would be 67 during the 16-month construction period. Construction personnel's commuting is estimated to add approximately 134 total daily trips to area roadways.

Construction of the Proposed Project also would require the use of temporary material staging yards. Material staging yards would be used as a reporting location for personnel, vehicle and equipment parking, and material storage. Six potential material staging yards have been identified, of which two would be used during construction of the Proposed Project. SCE or its contractors have previously used all of the yards that would be considered for the Proposed Project. See Section 3.7.1.1, Staging Areas, for more information.

A majority of construction materials would be delivered by truck to the potential material staging yards, although some materials may be delivered directly to construction sites. The estimated maximum number of construction vehicles that would be required on a single day for the Proposed Project would be 67.

To assess the impacts of truck trips for the Proposed Project, a heavy vehicle factor known as a passenger car equivalent (PCE) value was applied. This heavy vehicle factor accounts for additional space occupied, reduced speed, and reduced maneuverability associated with these vehicles as compared to standard automobiles. A PCE value of 2.0 was applied to the construction truck trip estimates, as recommended by the Highway Capacity Manual 2000 (Transportation Research Board, 2000). Based on the use of the 2.0 PCE, construction vehicles would add an additional 268 total daily trips to Proposed Project vicinity roadways. When combined, construction personnel commuting and transporting construction equipment would add a maximum of 402 total daily trips to Proposed Project vicinity roadways.

Because the origin and destination of construction personnel and vehicle trips are not known and to provide a conservative analysis, all trips related to Proposed Project construction presumably would use all of the roadways shown in Table 4.16-4 Construction Traffic Impacts on Regional and Local Roadways during any day of construction. The roadways which would be used during construction of the Proposed Project would be better known once final engineering has been completed. Short-term maximum traffic impacts were assessed by adding the anticipated Proposed Project-related construction traffic to the existing traffic on regional and local roadways. Table 4.16-4: Construction Traffic Impacts on Regional and Local Roadways, provides a summary of the results of this comparison.

A comparison of existing LOS (Table 4.16-3 Existing Traffic Operations) and the resulting LOS caused by temporary construction impacts (Table 4.16-4 Construction Traffic Impacts on Regional and Local Roadways) results in no change in the LOS for each local roadway and both I-215 and I-15. For local roadways, a LOS of "A" remains, meaning individual users would be virtually unaffected by others in the traffic stream. Both I-15 and I-215 would operate at LOS of "F" with or without the addition of traffic because of construction of the Proposed Project. I-215 and I-15 would be used to mobilize construction equipment and crews to and from the Proposed Project, with equipment stored during construction in material staging yards. However, the addition of Proposed Project traffic would lower the LOS at SR-74 from LOS "D" without the Proposed Project to LOS "E" with the Proposed Project. LOS "E" is not considered an acceptable LOS for SR-74 based on the LOS standard found within the SR-74 Transportation Concept Report (1985) produced by Caltrans. SR-74 is within the jurisdiction of Caltrans and the

LOS standards set forth by Caltrans were applied to SR-74. However, this assumes a worst case scenario, that is, all construction traffic would use SR-74. Additionally, the use of SR-74 would be a short-term and temporary condition. SCE would implement Applicant Proposed Measure Transportation 1 (APM TRA-1) to reduce potential impacts to SR-74 and SR-79 due to construction traffic to less than significant.

Table 4.16-4 Construction Traffic Impacts on Regional and Local Roadways

Roadway	Existing ADT Volume	Construction ADT Volume	Total ADT Volume	Roadway Capacity	Volume-to Capacity Ratio	Resulting Level of Service
I-15	163,000	402	163,402	160,500	1.02	LOS F
I-215	77,000	402	77,402	76,500	1.01	LOS F
SR-74	32,000	402	32,402	35,900	0.90	LOS E
SR-79	8,300	402	8,702	18,000	0.48	LOS B or better[1]
Briggs Road	4,190	402	4,592	18,000	0.26	LOS B or better[1]
Menifee Road	9,030	402	9,432	18,000	0.52	LOS B or better[1]
Matthews Road	4,380	402	4,782	13,000	0.37	LOS B or better[1]
Leon Road	6,200	402	6,602	18,000	0.37	LOS B or better[1]
Simpson Road	5,220	402	5,622	18,000	0.31	LOS B or better[1]
Thompson Road	4,500	402	4,902	18,000	0.27	LOS B or better[1]
Scott Road	10,730	402	11,132	18,000	0.62	LOS B or better[1]
Holland Road	4,220	402	4,622	13,000	0.36	LOS B or better[1]
Antelope Road	8,750	402	9,152	13,000	0.74	LOS B or better[1]
Ethanac Road	5,536	402	5,938	13,000	0.46	LOS B or better[1]

Roadway	Existing ADT Volume	Construction ADT Volume	Total ADT Volume	Roadway Capacity	Volume-to Capacity Ratio	Resulting Level of Service
Nicolas Road	7,530	402	7,932	35,900	0.22	LOS B or better[1]
Murrieta Hot Springs Road	29,350	402	29,752	35,900	0.83	LOS D
Newport Road	20,230	402	20,632	53,900	0.38	LOS B or better[1]

Notes:
Acronyms: ADT = Average Daily Traffic
[1] No daily volume thresholds exist for LOS A or B.
Source: Riverside County, 2008a

Bus lines 19, 27, 30, and 74 utilize SR-74 and provide travel between the City of Perris and other parts of Riverside County. In the event Material Staging Yard 3 is used during construction of the Proposed Project, use of SR-74 within the City of Perris would be limited to the transportation of equipment, materials, and personnel. No construction would occur along SR-74. No other bus lines were identified within the vicinity of the Proposed Project. Since no construction activities would occur along SR-74 within the City of Perris, the impact to bus transit services would be less than significant.

Temporary construction activities may intermittently reduce, disrupt, or temporarily eliminate access to portions of existing Class I Bike Paths and Class II Bike Lanes, pedestrian sidewalks, and trails. SCE would implement APM TRA-1 to reduce potential impacts related to Class I Bike Paths, Class II Bike Lanes, pedestrian sidewalks, and trails; therefore, the impacts would be less than significant.

Operation

Less Than Significant Impact. During O&M of the Proposed Project, routine inspections and emergency repair would require the use of vehicles and equipment. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. O&M of the Proposed Project would generate negligible vehicle trips on local and regional roadways. As a result, impacts on LOS for local and regional roadways or other modes of transportation during O&M of the Proposed Project would be less than significant.

4.16.4.2 Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Construction

Less than Significant Impact. The CMP roadway network includes I-215, I-15, SR-74, and SR-79. The 2011 Riverside County CMP (RCTC, 2011) designates a LOS standard of "E" for roadways within the CMP network. As shown in Table 4.16-4 Construction Traffic Impacts on Regional and Local Roadways all of the roadways within the CMP network would operate within a LOS standard of "E," except for I-215 and I-15. Both I-215 and I-15 would operate at LOS "F," with or without the addition of Proposed Project-generated traffic. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. During O&M of the Proposed Project, routine inspections and emergency repair would require the use of vehicles and equipment. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. O&M activities would generate negligible vehicle trips. These Proposed Project trips would travel along local roadways and not along roadways within the CMP network. Therefore, the impact would be less than significant.

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

Construction

Less Than Significant Impact. French Valley Airport is located approximately 0.45 of a mile west of Segment 2 of the Proposed Project. Additionally, the southern portions of the Proposed Project lie within the Airport Land Use Compatibility Plan Zones B1, C and D for French Valley Airport (Riverside County Airport Land Use Commission, 2012).

The maximum height of the Proposed Project facilities (i.e., TSPs) would be approximately 115 feet and construction cranes may reach heights above 145 feet temporarily, for short durations during construction of TSPs. SCE will file FAA notifications for Proposed Project structures as required, and based on preliminary design and proximity of the Proposed Project to the French Valley Airport, SCE currently plans to file FAA notifications. With respect to Proposed Project

structures, the FAA will conduct its own analysis and may recommend no changes to the design of the proposed structures; or request redesigning the proposed structures located near airports to reduce the height of such structures; or marking the structures, including the addition of aviation lighting; or placement of marker balls on wire spans. SCE would evaluate the FAA recommendations for reasonableness and feasibility, and in accordance with Title 14 Part 77, SCE may petition the FAA for a discretionary review of its determination to address any issues with the FAA determination. FAA agency determinations for permanent structures typically are valid for 18 months, and therefore such notifications would be filed upon completion of final engineering and before construction commenced. Approximately 74 poles are anticipated to require FAA notifications. SCE would consult with the FAA and implement recommendations, as required. Typical recommendations include, but are not limited to, the following: installation of marker balls on spans (catenaries) between structures, and/or installation of lighting on structures. Generally, marking or lighting is recommended by the FAA for those spans or structures that exceed 200 feet in height above ground level; however marking or lighting may be recommended for spans and structures that are less than 200 feet above ground level, but located within close proximity to an airport or other high-density aviation environment. Refer to Section 3.5.2.2, 115 kV Subtransmission Poles, for more information regarding SCE's compliance with FAA installation requirements. The height of facilities associated with the Proposed Project would have little potential to change air traffic patterns. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. Therefore, the impact would be less than significant.

4.16.4.4 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

Less Than Significant Impact. Construction of the Proposed Project would not alter any paved roadways or intersections, or introduce incompatible uses to the Proposed Project area. Some rehabilitation may be required for the existing, non-public unpaved access roads. See Section 3.7.1.3, Access Roads and/or Spur Roads, for more information about potential rehabilitation of existing unpaved roads.

Although access to pole site locations would be needed only temporarily, until such time that the proposed and/or dedicated public streets are improved to ultimate build out (as identified in the Riverside County General Plan Circulation Element), construction of these access locations

would be classified as permanent disturbance. See Table 3.5 Subtransmission Approximate Land Disturbance.

In places where the components of the Proposed Project would require a roadway or lane closure to minimize hazards caused by construction activity, SCE would coordinate with the local jurisdiction and/or Caltrans, and would employ commonly used traffic control measures consistent with those published in the CJUTCM. Flaggers may briefly hold traffic back for construction equipment, but emergency vehicles would be provided access, even in the event of temporary road closures. Where the installation of guard structures is required at transportation, flood control, and utility crossings for wiring stringing/removal activities, implementation of APM TRA-1 would reduce potential impacts resulting from construction of the Proposed Project.

Therefore, the Proposed Project would not substantially increase hazards due to a design feature or incompatible use. Thus, the impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project would not include components that would substantially increase any transportation-related design hazards nor involve incompatible uses. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. Although less likely to occur, emergency repairs may require lane closures or rehabilitation of unpaved roads. Therefore, O&M of the Proposed Project would not substantially increase hazards caused by a design feature or incompatible use. Thus, the impact would be less than significant.

4.16.4.5 Would the project result in inadequate emergency access?

Construction

Less Than Significant Impact. As discussed in Section 4.8, Hazards and Hazardous Materials, in places where the components of the Proposed Project would span a road or a lane, road closure could be required, and construction activities would be coordinated with the local jurisdiction so as not to cause closure of any emergency access route. Therefore, construction of the Proposed Project would not result in inadequate emergency access to the area affected by the Proposed Project. Thus, the impact would be less than significant.

Operation

Less Than Significant Impact. SCE inspects the subtransmission overhead facilities in a manner consistent with CPUC G.O. 165 a minimum of once per year via ground observation, but it usually occurs more frequently based on system reliability. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators,

repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush and weed control, and access road maintenance. Although less likely to occur, emergency repairs may require lane closures or rehabilitation of unpaved roads to complete emergency repairs. In places where maintenance or emergency repair of the Proposed Project would span a road or a lane closure would be required, activities would be coordinated with the local jurisdiction so as not to cause closure of any emergency access route. O&M of the Proposed Project would not result in inadequate emergency access to the area affected by the Proposed Project. Therefore, the impact would be less than significant.

4.16.4.6 Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Construction

Less Than Significant Impact. Temporary construction activities may intermittently reduce, disrupt, or temporarily eliminate access to portions of existing Class I Bike Paths, Class II Bike Lanes, trails, bus stops/shelters, and pedestrian facilities during construction of the Proposed Project. Construction of the Proposed Project is anticipated to cross above one rail line and as such is not expected to disrupt service as work would be timed to avoid instances coinciding with the railroad's use. Riverside County Policy C 17.1 requires the protection of Class I Bike Paths and Class II Bike Lanes and Riverside County Policy C 18.6 requires the provision of bicycle access between a proposed development and other parts of the county. Implementation of APM TRA-1 and APM TRA-2 would reduce potential impacts related to temporary conflicts with the established Riverside County General Plan policies C 17.1 and C 18.6 regarding impaired access to alternative transportation facilities and temporary reduction in performance and safety of such facilities. Construction activities could have short-term and temporary effects on the flow of bike, pedestrian or trail traffic. Because construction work would be of limited duration, effects on trails would be temporary and would not cause substantial deterioration. Therefore, the impact would be less than significant with the implementation of APM TRA-1 and APM TRA-2.

Operation

No Impact. O&M of the Proposed Project would involve periodic and infrequent inspections of facilities, and would not be in conflict with any local or regional policies, plans, or programs supporting alternative transportation, including public transit, bicycle, or pedestrian facilities. Therefore, no impact would occur.

4.16.5 Applicant Proposed Measures

SCE has designed and incorporated the following APMs into the Proposed Project to avoid or minimize potential impacts to transportation and traffic:

APM TRA-1 – Traffic control or other management plans would be prepared where necessary to minimize Proposed Project impacts on local streets, highways (SR-74 and SR-79), freeways, or other forms of transportation (Class I and II bicycle routes)

APM TRA-2 – Where the Proposed Project work area encroaches on public ROW and reduces the existing pedestrian path of travel to less than 48 inches wide, alternate pedestrian routing would be provided during construction activities

4.16.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Construction and O&M impacts of Segment 1 of the Alternative Project would be similar to those of Segment 1 of the Proposed Project. Implementation of APM TRA-1 and APM TRA-2 would avoid traffic impacts associated with SR-74 and SR-79, Class I Paths, Class II Bike Lanes, bike paths, and pedestrian paths and reduce those impacts to less than significant.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

Construction and O&M impacts of Segment 2 of the Alternative Project would be similar to those of Segment 2 of the Proposed Project. Implementation of APM TRA-1 and APM TRA-2 would avoid traffic impacts associated with SR-74 and SR-79, Class I Bike Paths, Class II Bike Lanes, and pedestrian paths and reduce those impacts to less than significant.

4.16.7 References

California Department of Transportation (Caltrans). 1985 (June). *State Route 74 Transportation Concept Report*.

———. 1999a (November). *State Route 79 Transportation Concept Report*.

———. 1999b (August). *Interstate 215 Transportation Concept Report*.

———. 1999c (March). *Route Concept Fact Sheet District 8 Interstate Route 15*.

———. 2012. *2011 Traffic Volumes on the California State Highway System*. Prepared by the Division of Traffic Operations.

California Inter-Utility Coordinating Committee. 2010 (April). *California Joint Utility Traffic Control Manual*. Fifth edition.

California Public Utilities Commission (CPUC). 1995. General Order Index. Available: http://docs.cpuc.ca.gov/PUBLISHED/Graphics/589.PDF. Accessed February 2013.

City of Hemet. 2012 (January). *City of Hemet 2030 General Plan, Circulation Element*.

City of Menifee. 2013. City of Menifee General Plan – Circulation Element. Available: http://www.cityofmenifee.us/index.aspx?NID=211. Accessed April 2014.

City of Murrieta. 2011. General Plan 2035. Available: http://www.murrieta.org/cityhall/cd/planning/docs/general.asp. Accessed February 12, 2013.

City of Perris. 2012. General Plan Webpage. Available: http://www.cityofperris.org/city-hall/general-plan.html. Accessed January 29, 2013.

City of Temecula. 2005. City of Temecula General Plan - Circulation Element. Available: https://www.cityoftemecula.org/NR/rdonlyres/D58A86C4-9838-4FF8-BABC-2D39D21BE106/0/Circulation.pdf. Accessed May 6, 2014.

Meyer, Mohaddes Associates. 2005 (May). *Riverside County Truck Routing and Parking Study Report*.

Riverside County Airport Land Use Commission. 2012. New Compatibility Plan. Available: http://www.rcaluc.org/plan_new.asp. Accessed June 2012.

Riverside County Transportation Commission (RCTC). 2011 (December). *2011 Riverside County Congestion Management Program*.

Riverside County Transportation Department. 2012a. Traffic Counts–2012. Available: http://www.org/trans/eng_traffic_counts.html. Accessed July 24, 2012.

———. 2012b. Ordinance 499. Available: http://rivcocob.com/ords/400/499.11.pdf. Accessed July 24, 2012.

Riverside County. 2008a. *General Plan–2008 Update, Circulation Element*.

_____. 2008b. *Riverside County General Plan, Southwest Area Plan*. Available: http://www.rctlma.org/genplan/general_plan_2008/area_plan_vol_1/Southwest_Area_Plan_2008.pdf. Accessed July 19, 2012.

Riverside Transit Agency (RTA). 2012. Bus Route Schedule Route 27. Available: http://www.riversidetransit.com. Accessed July 24, 2012.

Transportation Research Board. 2000. *Highway Capacity Manual, 2000*.

Section 4.17
Utilities and Service Systems

4.17 Utilities and Service Systems

This section describes the utilities and service systems in the area of the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project), as well as the potential impacts and project alternatives.

4.17.1 Environmental Setting

The Proposed Project consists of Segments 1 and 2 and is 15.4 miles in total length. The Proposed Project is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of the Proposed Project involves construction of a new 115 kV subtransmission line originating at Southern California Edison's (SCE's) existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of the Proposed Project would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of the Proposed Project involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of the Proposed Project begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of the Proposed Project would cross through unincorporated Riverside County and the City of Temecula. Additionally, SCE may utilize an existing material staging yard outside of Segments 1 and 2 in the City of Perris.

4.17.1.1 Water and Wastewater Services

Eastern Municipal Water District (EMWD) is one of the primary water service providers for western Riverside County and provides potable water in a 542-square-mile service area. EMWD provides potable water, wastewater collection and treatment, and recycled water to the cities of Menifee, Murrieta, and Temecula, as well as to unincorporated Riverside County (City of Menifee, 2012; EMWD, 2012; City of Temecula, 2014a). EMWD purchases the majority of its water from the Metropolitan Water District of Southern California (MWD). EMWD supplies water on a wholesale basis to the cities of Hemet, San Jacinto, and Perris; Lake Hemet Municipal Water District; Nuevo Water Company; Elsinore Valley Municipal Water District; Rancho California Water District; and Western Municipal Water District.

Additionally, Rancho California Water District (RCWD) supplies most of the domestic and commercial water to the City of Temecula. This water supply is drawn from the Murrieta-Temecula groundwater basin and supplemented with imported water from MWD. RCWD also provides water service to portions of the City of Murrieta and unincorporated areas of southwest Riverside County (RCWD, 2012).

EMWD is divided into four sewer service areas—Hemet-San Jacinto, Moreno Valley, Temecula Valley, and Perris Valley—for the purposes of collection, transmission, treatment, and disposal of wastewater. The district currently treats approximately 46 million gallons per day (mgd) of wastewater at the four regional water reclamation facilities. The Proposed Project is located within the Temecula Valley and Perris Valley sewer service areas, which have a typical daily flow of 12 mgd and 3.9 million mgd, respectively. RCWD also provides wastewater services to the City of Temecula (City of Temecula, 2013). Therefore, EMWD and RCWD would provide water and wastewater services to the Proposed Project area. Groundwater wells are located throughout Riverside County and are regulated by Riverside County Department of Environmental Health. The Proposed Project area is located within the Temecula Valley and San Jacinto groundwater basins (DWR, 2013).

4.17.1.2 Flood Control and Stormwater Management

The Proposed Project area is within the San Jacinto subwatershed, located in the Santa Ana Region Watershed and within the Upper Santa Margarita River Watershed located in the Santa Margarita Region Watershed (City of Murrieta, 2012a). The Riverside County Flood Control and Water Conservation District (RCFCWCD) is the regional flood management authority for western Riverside County and manages watersheds, including the San Jacinto subwatershed and Upper Santa Margarita River Watershed, with a number of master drainage plans, tailored to individual watershed areas within the district's boundaries. The district is also responsible for the Riverside County Drainage Area Management Plan for the Santa Ana Region and Santa Margarita Region, a programmatic document used to develop ordinances, plans, policies, and procedures to manage urban runoff (California Water Boards, 2007).

RCFCWCD is divided into seven geographical zones; the Proposed Project area is located within Zones 4 and 7. RCFCWCD maintains and operates flood management structures and facilities in unincorporated Riverside County and storm drains larger than 36 inches in diameter in the cities of Menifee, Murrieta, and Temecula. The cities of Menifee, Murrieta, and Temecula are responsible for Operations and Maintenance (O&M) of other drainage facilities within their respective city limits that are not operated or maintained by RCFCWCD. The City of Murrieta regulates stormwater runoff into its storm drain system with requirements to reduce pollutant discharges from construction sites and existing development, to the maximum extent practicable (City of Murrieta, 2012b).

4.17.1.3 Solid Waste and Recycling Services

Waste Management Inc. provides collection and recycling services for Riverside County, including the cities of Murrieta and Menifee (City of Murrieta, 2012a; City of Menifee, 2012).

The City of Temecula contracts with CR&R Inc. for trash collection and recycling services (City of Temecula, 2014a).

Three landfills are located within 20 miles of the Proposed Project area: El Sobrante Landfill, Badlands Sanitary Landfill, and Lamb Canyon Sanitary Landfill. These facilities are operated by Waste Management of the Inland Empire, a division of Waste Management Inc., and Riverside County Waste Management Department, which provide waste and recycling services to western Riverside County.

Waste Management Inc. operates El Sobrante Landfill, located at 10910 Dawson Canyon Road in Corona, approximately 28 miles northwest of the Proposed Project area. Lamb Canyon Sanitary Landfill, located at 16411 Lamb Canyon Road in Beaumont, is approximately 18 miles northeast of the Proposed Project area. This landfill is operated by the Riverside County Waste Management Department. Riverside County Waste Management Department also operates Badlands Sanitary Landfill, located at 14310 Frederick Street in Moreno Valley, which is approximately 16 miles northwest of the Proposed Project area. Table 4.17-1 Landfill Capacity provides detailed information about each of these three landfills.

Table 4.17-1 Landfill Capacity

Landfill	City	Total Maximum Permitted	Total Estimated Capacity Used	Remaining Estimated Capacity	Estimated Date to Close
El Sobrante Landfill	Corona	1.84 million tons	0.39 million tons	1.45 million tons	January 1, 2045
Lamb Canyon Sanitary Landfill	Beaumont	34.2 million cubic yards	15.3 million cubic yards	18.9 million cubic yards	April 30, 2021
Badlands Sanitary Landfill	Moreno Valley	33.5 million cubic yards	18.8 million cubic yards	14.7 million cubic yards	January 1, 2024
Source: CalRecycle, 2012					

4.17.1.4 Electricity and Natural Gas Services

SCE is the principal provider of electricity service for the Proposed Project, and Southern California Gas Company (SoCalGas) provides natural gas service. SCE serves more than 14 million people in the 50,000-square-mile area of central, coastal, and southern California, excluding the City of Los Angeles and a few other cities. SoCalGas provides natural gas in a coverage area of approximately 20,000 square miles throughout central and southern California, from the City of Visalia in the north to the City of El Centro in the south.

4.17.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

4.17.2.1 Federal

There are no federal regulations related to utilities and service systems that would apply to the Proposed Project.

4.17.2.2 State

California Government Code

Section 4216 under Title 1, Division 5, Chapter 3.1, Article 2 of the California Government Code protects underground structures during excavation. Under this law, excavators are required to contact a regional notification center at least two days before excavation of any subsurface installations. Underground Service Alert (USA) is the regional notification center for the Proposed Project area. USA notifies any utility providers that have buried lines within 1,000 feet of a project, and the providers are required to mark the specific location of their facilities before excavation activities begin. The code also requires excavators to probe and expose underground facilities by hand before using power equipment.

Integrated Waste Management Act

California's Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939, amended by Senate Bill 1016) sets a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. To help meet this requirement, the Act requires that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also establishes the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

4.17.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "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 CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside Countywide Integrated Waste Management Plan

The Riverside Countywide Integrated Waste Management Plan (CIWMP) outlines the goals, policies, and programs that the county and its cities are to implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. The Riverside County Waste Management Department is specifically charged with the responsibilities of (Riverside County, 2009):

- Implementing programs that adhere to the goals, policies, and objectives outlined in the county's Source Reduction and Recycling Element that enable unincorporated Riverside County to achieve 50 percent diversion of solid waste from landfill disposal
- Implementing programs that adhere to the goals, policies, and objectives outlined in the county's Household Hazardous Waste Element to reduce the amount of household hazardous waste that is disposed within landfills
- Meeting the solid waste disposal needs of all Riverside County residents
- Maintaining and updating the CIWMP and reporting to the California Integrated Waste Management Board on the county's progress in complying with AB 939

City of Menifee General Plan

The City of Menifee General Plan Land Use Element contains goals and policies related to utilities and infrastructure. According to the Land Use Element, future land use patterns and rates of development will affect the demand on infrastructure for the City of Menifee's utilities. As the population increases in the City of Menifee, it is important to the city to ensure that demand for these services does not exceed the supply and that the expansion of infrastructure is sufficiently addressed to accommodate future needs. This is especially critical in areas such as Quail Valley and Romoland, which are experiencing ongoing infrastructure challenges that affect livability for residents and limit the ability to accommodate new development (City of Menifee, 2013). The following policies related to utilities are relevant to the Proposed Project:

- Policy LU-3.1: Work with utility providers in the planning, designing, and siting of distribution and support facilities to comply with the standards of the General Plan and Development Code
- Policy LU-3.2: Work with utility providers to increase service capacity as demand increases
- Policy LU-3.4: Require that approval of new development be contingent upon the project's ability to secure appropriate infrastructure services

City of Murrieta Municipal Code

The City of Murrieta Municipal Code, Title 8 Health and Safety, Section 8.28.020 Integrated Waste Management, contains the following prohibition guidelines (City of Murrieta, 2012a):

- Provisions of Service. The city shall provide for or furnish integrated waste management services relating to collection, transfer, and disposal of refuse, recyclables, and compostables within and throughout the city. Such services may be furnished by any one or combination of the following:

  - City officers and employees
  - Contractors franchised or licensed by the city
  - Agreement with another local agency

- Manner, Time, and Frequency of Collection. The city council may establish by resolution, the manner in which integrated waste management services are provided within the city, specifying the hours, days, and frequency of collection
- Categories. The city council may determine waste management collection categories, i.e. residential, single-family residential, multifamily residential, commercial, industrial, special, special event, household hazardous waste and other, and may make or impose collection requirements which vary for such categories
- Collection Arrangements Required. The owner, occupant, or other person responsible for the day-to-day operation of every property in the city shall make arrangements with the city, another local agency approved by the city, or a contractor franchised or licensed by the city for the collection of refuse, recyclable materials, and compostable materials as set forth in this chapter
- Prohibitions. No person shall engage in the collection of solid waste without valid authorization from the city

City of Perris Municipal Code

The City of Perris has not developed or adopted regulations for utilities applicable to the Proposed Project.

City of Temecula Municipal Code

The following City of Temecula General Plan Growth Management/Public Facilities Element policies are relevant to the Proposed Project (City of Temecula, 2013):

- Policy 8.3: Provide solid waste reduction and recycling within the city through implementation of the Source Reduction and Recycling Element
- Policy 9.1: Coordinate with responsible companies to provide continued maintenance, development, and expansion of electricity, natural gas, and telecommunications systems serving residents and businesses
- Policy 9.2: Pursue the undergrounding of utilities along arterial roads, where feasible
- Policy 9.3: Encourage installation of new technological infrastructure throughout the city including broad band, fiber optics, wireless and other developing technologies

In addition, the City of Temecula Municipal Code, Title 8 Health and Safety, Section 8.20 Waste Management Article II. Integrated Waste Management, contains the following prohibition guidelines (City of Temecula, 2014b):

- 8.20.290 Provision of Service. The city shall provide for or furnish integrated waste management services relating to collection, transfer, and disposal of refuse, recyclables, and compostables within and throughout the city. Such services may be furnished by any one or combination of the following:

  A. City officers and employees

B. Contractors franchised or licensed by the city
C. Agreement with another local agency

- 8.20.300 Manner, Time, and Frequency of Collection. The city council may establish by resolution the manner in which integrated waste management services are provided within the city, specifying the hours, days and frequency of collection
- 8.20.310 Categories. The city council may determine waste management collection categories, i.e. residential, single-family residential, multifamily residential, commercial, industrial, special, special event, household hazardous waste and other, and may make or impose collection requirements which vary for such categories
- 8.20.320 Collection Arrangements Required. The owner, occupant or other person responsible for the day-to-day operation of every property in the city shall make arrangements with the city, another local agency approved by the city or a contractor franchised or licensed by the city for the collection of refuse, recyclable materials and compostable materials as set forth in this chapter
- 8.20.330 Prohibitions. No person shall engage in the collection of solid waste without valid authorization from the city

4.17.3 Significance Criteria

The significance criteria for assessing the impacts to public services are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project would cause a potentially significant impact if it:

- Exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB)
- Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Requires or results in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Does not have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed
- Results in the determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the projected demand in addition to the provider's existing commitments
- Is served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Does not comply with federal, state, and local statutes and regulations related to solid waste

4.17.4 Impact Analysis

4.17.4.1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Construction

No Impact. During construction of the Proposed Project, portable restrooms would be on-site for use by construction personnel. The portable restrooms would not be connected to sewer or wastewater systems, and wastes generated in their use would be disposed in accordance with applicable sanitation waste management practices. No construction of water or wastewater treatment facilities or the expansions of existing facilities would be part of construction. No impact associated with wastewater treatment requirements would occur.

Operation

No Impact. O&M of the Proposed 115 kV subtransmission line and associated components would not involve any wastewater discharge and would not exceed wastewater treatment requirements of the applicable RWQCB. Therefore, no impact would occur.

4.17.4.2 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

No Impact. During construction of the Proposed Project, portable restrooms would be on-site for use by construction personnel. The portable restrooms would not be connected to sewer or wastewater systems, and wastes generated in their use would be disposed in accordance with applicable sanitation waste management practices. No construction of water or wastewater treatment facilities or the expansions of existing facilities would be part of construction. A minimal amount of water would be used for dust suppression during construction activities, but not a substantial amount that would require construction or expansion of existing water facilities. Therefore, no impact would occur.

Operation

No Impact. The Proposed Project does not include construction of water or wastewater treatment facilities or the expansions of existing facilities; therefore, such facilities would not be needed or altered to accommodate the Proposed 115 kV subtransmission line and no impact would occur.

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

Construction

Less Than Significant Impact. Construction of the Proposed Project would include a minimal amount of new impermeable surfaces (e.g., TSP foundations); this minimal amount of impermeable surface would not create a significant change in the existing stormwater conditions. Construction activities would not increase the need for new stormwater drainage facilities or expansion of existing facilities. Furthermore, all potential access roads would be permeable (dirt), with no paving involved, thus reducing the amount of stormwater likely to run offsite away from Proposed Project construction areas. Therefore, the impact would be less than significant.

Operation

No Impact. O&M of the Proposed Project, including all activities discussed in Section 3.8, Operations and Maintenance would necessitate the use of, at most, a very small amount of water. In addition, existing water use at Valley 500/115 kV Substation would remain unchanged. This incremental and small amount of potential water use would not result in the construction of new stormwater drainage facilities or expansion of existing facilities. Therefore, there would be no impact.

4.17.4.4 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

Less Than Significant Impact. Water use during construction activities would be minimal and would be used for dust suppression, cleanup, drinking, and hand washing. Most likely, water would be brought to construction work sites in water trucks and would not be a substantial amount sufficient to affect existing entitlements or resources. Portable restrooms used during construction would not have a connection to sewer or wastewater systems, and wastes generated in them would be disposed in accordance with applicable sanitary waste management practices. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project, including all activities discussed in Section 3.8, Operations and Maintenancewould necessitate the use of, at most, a very small amount of water. In addition, existing water use at Valley 500/115 kV Substation would remain unchanged. This incremental and small amount of potential water use would not necessitate the expansion of any water supply entitlement. Therefore, the impact would be less than significant.

4.17.4.5 Would the project 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?

Construction

No Impact. Construction of the Proposed Project would not involve discharge of wastewater to a wastewater treatment facility. Portable restrooms would be used by construction personnel, but they would not be connected to sewer or wastewater systems. Therefore, no impact would occur.

Operation

No Impact. The Proposed Project does not include construction of water or wastewater treatment facilities or the expansions of existing facilities; therefore, such facilities would not be needed or altered to accommodate the Proposed 115 kV subtransmission line and no impact would occur.

4.17.4.6 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Construction

Less Than Significant Impact. Construction of the Proposed Project would result in generation of various waste materials, many of which could likely be recycled and salvaged. Waste items and materials would be collected by construction personnel and either taken directly to a landfill for disposal or stored temporarily in one of the material staging yards being used for the project, until disposed of. All waste materials that were not recyclable would be categorized by SCE or its contractor to assure appropriate final disposal. Nonhazardous waste would be transported to local waste management facilities. Existing wood poles that would be removed for the Proposed Project would either be disposed of in a Class I hazardous waste landfill, disposed of in the lined portion of an RWQCB-certified municipal landfill, reused by SCE or returned to the manufacturer.. Limited use of hazardous materials, such as fuels, lubricants, and cleaning solvents, would be required as part of construction activities. All hazardous materials would be stored, handled, and used in accordance with the regulations described in Section 4.8, Hazards and Hazardous Materials. Material excavated for the Proposed Project would be used as fill; backfill for new wood poles, wood guy stub poles, light weight steel poles, TSP footings, or anchors installed for the project; or would be made available for use by the landowner and/or disposed off-site at an appropriately licensed waste facility. Although waste would be generated by construction activities that would be sent to one or more of the landfills in the Proposed Project area, the amount would not be sufficient to affect the permitted capacity of any landfill. Currently, the available capacity at the three nearest landfills is 79, 55, and 44 percent, respectively. The impact would be less than significant.

Operation

No Impact. O&M of the Proposed Project would consist of routine maintenance and emergency repair of the facilities, and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles, tree trimming, brush and weed control, and access road maintenance. These activities would not generate waste in an amount that would affect the permitted capacity of landfills in the Proposed Project area. No impact would occur.

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

Construction

Less Than Significant Impact. Construction of the Proposed Project would comply with state and local regulations related to solid waste. Construction activities would include the removal and disposal of treated wood poles. These poles would either be disposed of in a Class I hazardous waste landfill, disposed of in the lined portion of an RWQCB-certified municipal landfill, reused by SCE or returned to the manufacturer. Therefore, the impact would be less than significant.

Operation

Less Than Significant Impact. O&M of the Proposed Project would involve routine maintenance activities and emergency repair. Although expected to be very low quantities, all transport of solid waste would be in compliance with applicable laws, rules, and regulations. Therefore, impacts would be less than significant.

4.17.5 Applicant Proposed Measures

Because no significant impacts to utilities and service systems would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.17.6 Alternative 2

The Alternative Project would be approximately 19 miles in total length and would extend approximately 4 miles longer than the Proposed Project. Segment 1 of the Alternative Project would follow a route identical to that of Segment 1 of the Proposed Project for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of the Alternative Project would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of the Alternative Project would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of the Proposed Project. At this location, Segment 2 of the Alternative Project would follow the same approximately 3-mile route as Segment 2 of the Proposed Project, for a total of 5 miles.

The Alternative Project along the shared approximately 8-mile and 3-mile portions of Segment 1 and Segment 2 would include the same improvements as the Proposed Project. Therefore, impacts along these shared areas would be the same as the Proposed Project. The following discussion describes the resources and impacts where the Alternative Project would differ from the Proposed Project.

Segment 1 of the Alternative Project

For the remaining approximately 6 miles (from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation), Segment 1 of the Alternative Project would traverse through the City of Menifee, unincorporated Riverside County, and portions of the City of Murrieta. It would follow existing roadways, with the exception of one portion of the route that would follow existing SCE facilities to the intersection of unimproved Clinton Keith Road.

Given that the location of Segment 1 of the Alternative Project would be within the jurisdiction of the same utility and service systems as Segment 1 of the Proposed Project, the effects on utilities and service systems would be similar to those of Segment 1 of the Proposed Project. Therefore, impacts are expected to be less than significant.

Segment 2 of the Alternative Project

For the first approximately 2 miles (from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road), Segment 2 of the Alternative Project would traverse through the City of Murrieta and unincorporated Riverside County. It would follow the existing Valley-Auld-Triton 115 kV Subtransmission Line and existing roadways.

As stated above, the location of Segment 2 of the Alternative Project would be within the jurisdiction of the same utility and service systems as Segment 2 of the Proposed Project. As the effects on utilities and service systems would be similar to those of Segment 2 of the Proposed Project, the impact would be less than significant.

4.17.7 References

California Department of Resources Recycling and Recovery (CalRecycle). 2012. Solid Waste Information System. Available: http://www1.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List?FAC=Disposal&OPSTATUS=Active&REGSTATUS=Permitted. Accessed July 25, 2012.

California Department of Water Resources (DWR). 2013. Basins and Subbasin of the South Coast Hydraulic Region. Available: http://www.water.ca.gov/groundwater/bulletin118/south_coast.cfm. Accessed January 7, 2013.

California Water Boards. 2007. Santa Ana Regional Water Quality Control Board. Riverside County Municipal NPDES Storm Water Permit. Drainage Area Management Plan (DAMP). Santa Ana and Santa Margarita Regions. April 2007. Available: http://rcflood.org/downloads/NPDES/Documents/SA_SM_DAMP/DAMP%2007-21-06.pdf. Accessed April 2014.

City of Menifee. 2012. Utilities. Available: http://www.cityofmenifee.us/BusinessDirectoryii.aspx?ysnShowAll=0&lngNewPage=0&txtLetter=&txtZipCode=&txtCity=&txtState=&txtBusinessName=&lngBusinessCategoryID=35&txtCustomField1=&txtCustomField2=&txtCustomField3=&txtCustomField4=&txtAreaCode=. Accessed July 25, 2012.

_____. 2013. City of Menifee General Plan – Land Use Element. Available: http://www.cityofmenifee.us/index.aspx?NID=231. Accessed April 2014.

City of Murrieta. 2012a. Upper Santa Margarita River Watershed Water Quality Workplan for the Santa Margarita Region of Riverside County. June 30, 2012. Available: http://www.murrieta.org/cityhall/pwe/water.asp. Accessed April 2014.

_____. 2012b. Municipal Code. Title 8 Health and Safety. Section 8.28.020 Integrated Waste Management—Guidelines for Service—Prohibitions. Available: http://www.amlegal.com/nxt/gateway.dll/California/murrieta_ca/murrietacaliforniamunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:murrieta_ca. Accessed July 26, 2012.

City of Temecula. . 2013. City of Temecula General Plan Growth Management/Public Facilities Element. December 2013. Available: http://www.cityoftemecula.org/Temecula/Government/CommDev/Planning/zoningdocuments/generalplan.htm. Accessed April 2014.

_____. 2014a. Utilities. Available: http://www.cityoftemecula.org/Temecula/Residents/ResidentResources/Utilities.htm. Accessed April 2014.

_____. 2014b. City of Temecula Municipal Code. Title 8 Health and Safety. Chapter 8.20 Waste Management. Article II. Integrated Waste Management. Available: http://www.qcode.us/codes/temecula/. Accessed April 2014.

East Municipal Water District (EMWD). 2012. EMWD Service Area. Available: www.emwd.org/index.aspx?page=59. Accessed July 25, 2012.

Rancho California Water District (RCWD). 2012. About the District. Available: https://www.ranchowater.com/about.aspx. Accessed July 25, 2012.

Riverside County. 2009. Riverside County Integrated Waste Management Plan. Available: http://www.rivcowm.org/opencms/ab939/pdf/CIWMP-PDFs/2008-CIWMP-FinalFiveYearReviewReport.pdf. Accessed January 7, 2013.

Section 4.18
Cumulative Impacts

4.18 Cumulative Impacts

This section analyzes the potential cumulative impacts related to the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project).

The California Environmental Quality Act (CEQA) requires lead agencies to consider the cumulative impacts of proposals under their review. Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." According to Section 15130(a)(1), a cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions." According to the Council on Environmental Quality regulations (40 Code of Federal Regulations 1508.7) a cumulative impact, "is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions." The cumulative impacts analysis "would examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects" (Section 15130[b][3]).

Section 15130(a)(3) also states that an environmental document may determine that a project's contribution to a significant cumulative impact would be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of mitigation measure(s) designed to alleviate the cumulative impact.

In conducting a cumulative impacts analysis, the proper frame of reference is the temporal span and spatial areas in which the Proposed Project would cause impacts. In addition, a discussion of cumulative impacts must include either:

- A list of past, present, and probable future projects, including, if necessary, those outside the lead agency's control; or
- A summary of projections contained in an adopted general plan or related planning document, or in a previously certified Environmental Impact Report, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provided that such documents are referenced and made available for public inspection at a specified location (Section 15130[b][1])

The term "probable future projects" includes: approved projects that have not yet been constructed; projects that are currently under construction; projects requiring an agency approval for an application that has been received at the time a Notice of Preparation is released; and

projects that have been budgeted, planned, or included as a later phase of a previously approved project (Section 15130[b][1][B][2]). A listing of projects meeting this criteria within approximately 1 mile of the Proposed Project are listed in Table 4.18-1 Cumulative Projects within 1 Mile of the Proposed Project, along with the project identification number, a brief description, the jurisdiction in which it is located, distance from the project, status, and anticipated construction schedule. These projects are also depicted in Figure 4.18-1 Planned and Proposed Projects.

The following subsections discuss whether, when combined with past, present, planned, and probable future projects in the area, the Proposed Project could result in significant short-term or long-term environmental impacts. Short-term impacts are generally associated with construction of the Proposed Project, while long-term impacts are those that result from permanent Proposed Project features or Operations and Maintenance (O&M) of the projects.

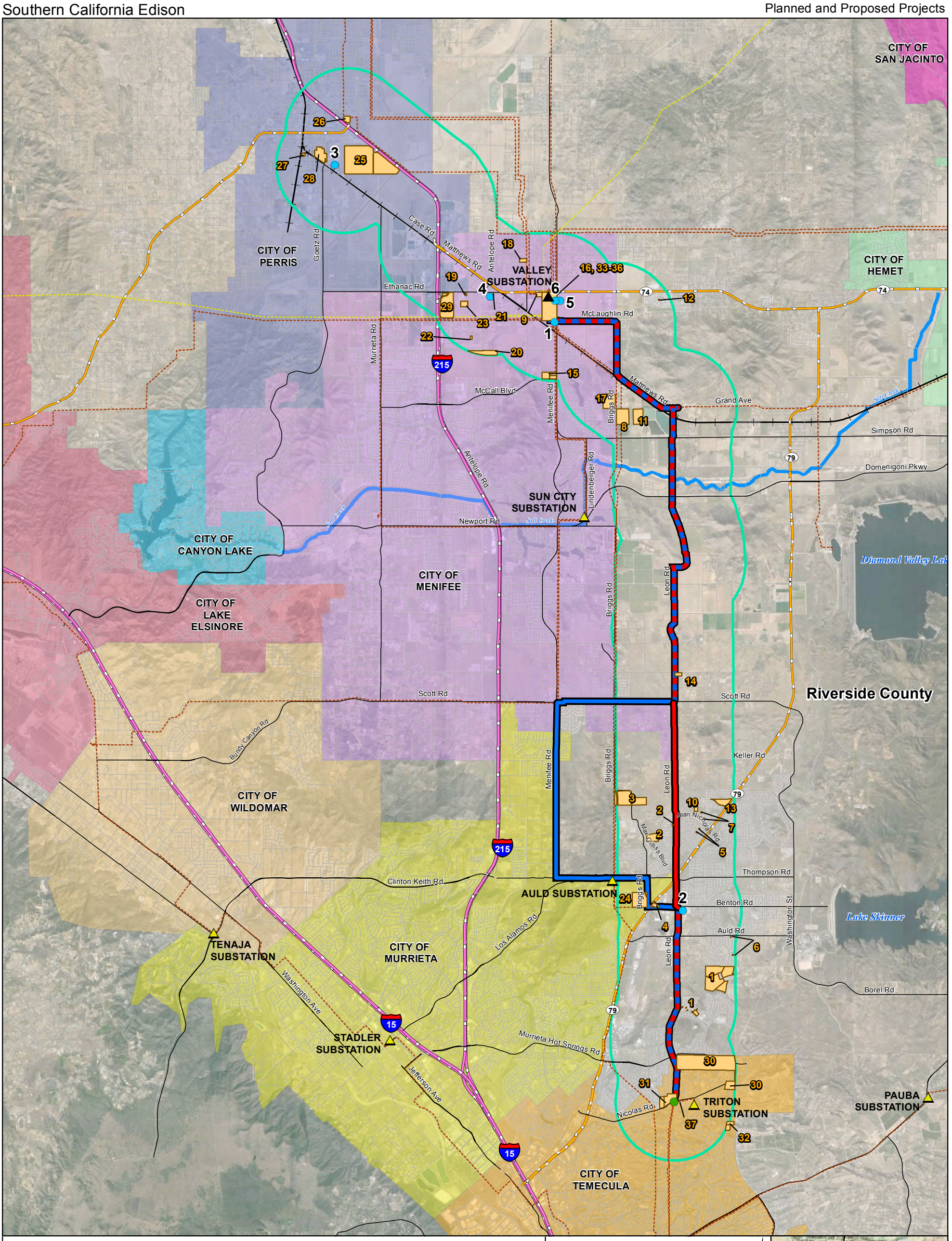
4.18.1 Aesthetics

As discussed in Section 4.1, Aesthetics, construction of the Proposed Project would have a less than significant impact on scenic vistas or scenic resources of a state scenic highway. In addition, construction 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 Proposed Project area. While construction of the Proposed Project could degrade the existing visual character and quality of the Proposed Project area due to the visibility of construction-related heavy equipment from roadways, nearby residences and recreational facilities, and businesses, construction activities are expected only to last approximately 16 months, and any construction impacts to visual character and quality of the Proposed Project area would be temporary; impacts would thus be less than significant.

O&M of the Proposed Project would have no impact on scenic vistas or scenic resources of a state scenic highway. In addition, O&M 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 Proposed Project area. However, O&M of the Proposed Project would result in an incremental change in the visual character and quality of the Proposed Project area. When considered in conjunction with other potential developments in the vicinity of the Proposed Project, the visual character and quality of the Proposed Project area would change over time if the Proposed Project and cumulative projects are implemented. Conversely, the overall effect of the cumulative development would be subject to applicable area plans, general plans, and design standards which include rural residential, very low density, and agricultural land uses within the Proposed Project area. The Proposed Project would not be a dominant visual feature within the vicinity; rather it would blend in with the cumulative urban development projects planned by the cities of Menifee, Murrieta, and Temecula, as well as Riverside County.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT **FIGURE 4.18-1**

Southern California Edison Planned and Proposed Projects



Proposed Project
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project
- Alternative 115 kV Subtransmission Line

Potential Material Staging Yards
- Staging Yards 1-6

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

Cumulative Projects
- Project Boundary
- 1 Mile Distance From Proposed Project

Sources: SCE, 2014; Riverside County, 2014; City of Temecula, 2014; City of Perris, 2014; Cify of Menifee, 2014; Aerial Image: Google Earth Pro, 2014

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However, as discussed in Section 4.1, there is one location along Segment 1 of the Proposed Project where O&M of the Proposed Project would substantially change and degrade the visual character and quality of the view. Specifically, at a neighborhood trail in unincorporated Riverside County along Leon Road at Lantana Way, looking north (Key Observation Point [KOP] 8), the Proposed Project would result in a substantial change to views from the neighborhood trail and residences along Leon Road as it would install new wood poles where no above ground electrical poles currently exist. The new wood poles would be taller than street lamps and trees and would dominate the center portion of the view. Given the height and scale of the new wood poles, they would be noticeable to trail users, residents, and motorists, and would obstruct the views of the open sky and Double Butte Mountain to the north from the neighborhood trail (on which the KOP is located) and from nearby residences. Overall, impacts from O&M on a majority of the Proposed Project to visual quality and character are less than significant. However, impacts associated with KOP 8 are considered significant and unavoidable, and no feasible avoidance or minimization measures are available to reduce this finding to a less than significant level. Therefore, O&M of the Proposed Project would contribute to a cumulatively considerable impact related to aesthetics.

4.18.2 Agriculture and Forestry Resources

The Proposed Project would cross lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance (collectively referred to hereafter as "Farmland"). Construction of the Proposed Project would cause temporary disturbance to Farmland, resulting from site preparation associated with construction activities. At the conclusion of construction, the majority of disturbed areas would be returned to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE. No forest land, timberland, or timberland zoned Timberland Production is located within or along the Proposed Project. Therefore, construction of the Proposed Project would not contribute to a cumulatively considerable impact related to agriculture and forestry resources. The Proposed Project would permanently convert 5.3 acres of Farmland to nonagricultural use because of the installation of anchors, the use and maintenance of a permanent unpaved access road, and installation of subtransmission structures. The conversion of 5.3 acres of lands identified as Farmland would represent a loss of 0.0012 percent of the approximately 433,859 acres of Farmland identified in Riverside County. The impact from converting such a small percentage of the Farmland identified in Riverside County to non-agricultural use would be less than significant.

In addition, as described in Section 4.2, Agriculture and Forestry Resources, the Proposed Project would cross three Agricultural Preserve parcels that carry active Williamson Act – Prime Agricultural Land status, known as Sites 1, 2, and 3 (see Figure 4.2-2 Williamson Act Lands and Agricultural Preserves). The permanent disturbance from installing new structures within Site 1 and Site 2 would be approximately 0.74 of an acre, or approximately 0.5 percent of the total area of both parcels. The reconductoring of approximately 12 existing light weight steel poles within Site 3 would not result in any permanent disturbance within this parcel. Because the Proposed Project would convert such a small percentage of Williamson Act land to non-agricultural use, and would not impair continuing agricultural activities within each parcel, impacts would be less

than significant. Furthermore, electrical transmission facilities are recognized as a compatible use within any agricultural preserve according to California Government Code 51238(a)(1).

As shown in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project, there are a number of projects within 1 mile of the Proposed Project. Based on a review of the California Department of Conservation Farmland Mapping and Monitoring Program, in conjunction with Figure 4.18-1 Planned and Proposed Projects, these projects would be located in Farmland and would, therefore, have the potential to convert Farmland to non-agricultural use. Although the Proposed Project itself would not create a significant impact to agricultural resources, when considered with other regional projects, it may potentially create a cumulatively considerable impact. There is no feasible mitigation to reduce cumulative impacts to Farmland. Therefore, the cumulative agricultural impacts from O&M of the Proposed Project and other projects have the potential to contribute to a cumulatively considerable agricultural impact.

4.18.3 Air Quality

As presented in Section 4.3, Air Quality, criteria pollutant emissions generated during construction of the Proposed Project have the potential to exceed the South Coast Air Quality Management District's (SCAQMD's) regional mass-based daily thresholds for nitrogen oxides (NO_X) and particulate matter smaller than 10 microns (PM_{10}). With implementation of Applicant Proposed Measures (APM) AIR-1, APM AIR-2, and APM AIR-3, emissions of NO_X and PM_{10} would be reduced below a level of significance. The SCAQMD established the regional mass-based daily thresholds in consideration of cumulative air pollution in the South Coast Air Basin. Thus, projects that do not exceed these thresholds do not significantly contribute to cumulative air quality impacts. The Proposed Project and other projects listed in Table 4.18-1 Cumulative Projects within 1 Mile of the Proposed Project may contribute to adverse air quality; however, the Proposed Project is located in an area designated as nonattainment for ozone and particulate matter. Since the Proposed Project would not exceed the established thresholds with implementation of APM AIR-1, APM AIR-2, and APM AIR-3, it is anticipated that the Proposed Project would not contribute to a cumulatively considerable net increase of any criteria pollutants for which the Proposed Project region is nonattainment and would not result in cumulatively considerable air quality impacts.

Emissions generated during O&M of the Proposed Project would be limited to those produced from annual vehicle maintenance trips to the Proposed Project area. As presented in Section 4.3, Air Quality, the impact on air quality resulting from O&M of the Proposed Project would be less than significant. Therefore, infrequent and intermittent inspections and maintenance trips associated with O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to air quality.

4.18.4 Biological Resources

As discussed in Section 4.4, Biological Resources, potential direct and indirect impacts of the Proposed Project would predominantly be associated with construction activities, such as road

grading and construction, pole site preparation and line stringing activities, vegetation removal to facilitate line/pole placement, and movement of equipment and project materials. These activities have the potential to result in significant impacts to biological resources; however, with the implementation of APMs, these impacts are reduced to less than significant levels and are not cumulatively considerable.

The Proposed Project occurs entirely within the coverage area of the Western Riverside County Multiple-Species Habitat Conservation Plan (WRCMSHCP). In addition, the Proposed Project occurs within the Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) area, as noted in Section 4.4 and identified in Figure 4.4-16. Each of these resource management plans provide specific requirements for projects that occur within their planning area. Southern California Edison (SCE) will specifically comply with all regulations and policies outlined in the WRCMSHCP and Stephens' Kangaroo Rat HCP.

Through implementation of the WRCMSHCP, any projects covered by the WRCMSHCP will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the covered species, including the 31 species that are currently listed as threatened or endangered and the one species that is currently proposed for listing. As such, the intent of the WRCMSHP is to result in a long-term benefit of covered species by preserving their habitat in order to address their lifecycle needs. Thus, based on the features of the WRCMSHCP itself, impacts to covered species are mitigated below a level of significance.[5]

The WRCMSHCP will not cause adverse cumulative effects related to the reduction of sensitive vegetation communities within the WRCMSHCP Area; rather, the WRCMSHCP is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County. Part of the purpose and goals of the WRCMSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information. In addition, the purpose and goals of the WRCMSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information. Therefore, SCE's participation in the WRCMSHCP will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for species covered by the WRCMSHCP.

Similar to SCE's compliance with the WRCMSHCP requirements, all projects in the vicinity of the Proposed Project, listed in Table 4.18-1 Cumulative Projects within 1 Mile of the Proposed Project, will either comply with the requirements of these resource management plans or, if these projects occur outside of the planning boundaries of such plans, independently comply with applicable state, federal, and local regulations concerning protected species and their habitats; such that each project's impacts to biological resources are mitigated to the extent feasible. Therefore, based on the Proposed Project's compliance with these resource management plan

[5] LSA Associates, Best, Best, and Krieger, United States Fish and Wildlife Service, California Department of Fish and Game, and DUDEK & Associates. 2003. Western Riverside County Multiple Species Habitat Conservation Plan Final EIR/EIS (Volume 4). Available: http://www.rcip.org/conservation.htm. Accessed January 31, 2013.

requirements and that of other projects in the area, cumulative impacts to biological resources would be less than significant.

4.18.5 Cultural Resources

As discussed in Section 4.5, Cultural Resources, SCE has designed the Proposed Project to avoid impacts on all known cultural (archaeological/historical) resources. While other planned projects that may impact such resources are known in the region, the Proposed Project would not contribute to a cumulatively considerable impact.

Portions of Segment 1 of the Proposed Project are within geologic units of "High B" potential and portions of Segment 2 of the Proposed Project are within geologic units with a "High A" sensitivity rating, as determined by the Riverside County General Plan's Paleontological Resources Sensitive Map. All of the six potential material staging yards (see Figure 3.6 Staging Yards, for locations of staging yards) and the access roads to these yards lie within units of "High B" sensitivity (approximately 11 acres), and any earthmoving of undisturbed sediments at those locations would have the potential for direct impacts on paleontological resources during construction. Since geologic units of "High A" and/or "High B" potential are areas that could contain paleontological resources, construction of the Proposed Project could have the potential to directly impact paleontological resources. However, with implementation of APM CUL-1, potential impacts to paleontological resources would be reduced to a less than significant level. Although there are planned projects with ground-disturbance activities proposed to occur in the Proposed Project vicinity and in areas that physically overlap with the Proposed Project, these projects are expected to have mitigation measures that would reduce impacts to less than significant. Therefore, construction of the Proposed Project would not contribute substantially to cumulative impacts to paleontological resources.

O&M activities associated with the Proposed Project are not expected to result in impacts to cultural (archaeological/historical) or paleontological resources. Although it is possible that additional fossils would erode onto the surface during the lifetime of the Proposed Project, they are not expected to erode out of the relatively flat-lying, populated areas, and would, therefore, be protected by virtue of the fact that they would be difficult to locate for the purpose of vandalism or unauthorized collection. Therefore, because the Proposed Project would have no unmitigated significant impacts on either archaeological/historical or paleontological cultural resources, O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to such resources.

4.18.6 Geology and Soils

Geology and soils impacts are generally localized and site specific. The impacts to geology and soils associated with the Proposed Project would be site specific and would consist of the potential for erosion due to soil disturbance and alteration of natural drainages during construction activities. Portions of the Proposed Project travel through or near potentially active faults, but no defined active faults cross beneath the Proposed Project, and therefore the potential

for ground rupture hazard is considered very low. The relatively flat topography along the majority of the Proposed 115 kV subtransmission line indicates little to no potential for landslides to occur. Although liquefaction potential is moderate to high near Salt Creek and the Terminal Tubular Steel Pole (TSP), based on existing conditions and location, construction activities associated with the Proposed Project are not anticipated to encounter unstable soil or geologic units, cause landslides, or create unstable conditions.

Proposed Project infrastructure would be designed in a manner that would mitigate or avoid any significant effects associated with geology and soils through the implementation of standard practices and in consideration of information produced during a geotechnical investigation. If unstable soil conditions are identified during the geotechnical evaluation, SCE would design relevant project components to address these conditions. Therefore, with appropriate project design and compliance with current building codes and regulations, potential construction and O&M impacts related to geology and soils would be less than significant.

Geotechnical impacts are considered site-specific; any cumulative development in the region would also be required to comply with current building codes and regulations. In addition, these cumulative projects are geographically removed from the geologic context of the Proposed Project. When considering the effects that could be cumulatively considerable, such as the loss of topsoil and erosion, potential impacts would be minimized by compliance with existing laws, regulations, and ordinances that require projects to obtain grading permits and implementation of Storm Water Pollution Prevention Plans (SWPPP[s]). Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to geology and soils.

4.18.7 Greenhouse Gas Emissions

Construction and O&M of the Proposed Project would not result in significant impacts from greenhouse gas (GHG) emissions. As discussed in Section 4.7, Greenhouse Gas Emissions, the total amortized construction emissions and annual operational GHG emissions associated with the Proposed Project would be 68 metric tons of carbon dioxide-equivalent per year. This estimate is less than one percent of the 10,000 metric tons per year threshold that has been adopted by the SCAQMD and only about one percent of the California Air Resources Board's (CARB's) 7,000 metric tons per year draft threshold. Although construction and operation of projects considered in the cumulative impact analysis may result in an increase in GHG emissions, the Proposed Project's contribution to cumulative impacts would not be considerable, since the Proposed Project's GHG emissions would be much less than both the CARB's draft and SCAQMD's adopted significance thresholds. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to GHG emissions.

4.18.8 Hazards and Hazardous Materials

Construction and O&M of the Proposed Project would not result in significant impacts associated with hazards and hazardous materials. The Proposed Project would require the use of hazardous materials, such as fuels, lubricants, and solvents, during construction and O&M. The transport, use, and disposal of hazardous materials during construction and O&M would be conducted in accordance with applicable regulatory requirements. Site-specific best management practices (BMP), as part of the SWPPP, and implementation of the Worker Environmental Awareness Plan (WEAP) would reduce potential impacts from hazardous material incidents to a less than significant level.

The other projects considered in the cumulative impact analysis could involve the storage, use, transport, and accidental release of hazardous materials, similar to those described previously. However, the Proposed Project and the cumulative projects would be required to comply with existing hazardous materials regulations (e.g., regulations administered by the U.S. Environmental Protection Agency, the California Environmental Protection Agency, and the California Department of Toxic Substances Control). Therefore, construction of the Proposed Project would not contribute to a cumulatively considerable impact related to hazardous materials storage, use, transport, or accidental spills.

Although portions of the Proposed Project would be located within moderate or very high fire hazard zones, wildland fire risk during construction of the Proposed Project is generally low. To minimize the potential fire risks during construction and O&M, SCE would implement standard fire prevention protocols and comply with applicable laws and regulations. As a result of these measures, construction and O&M of the Proposed Project would have a less than significant impact to risk of loss, injury, or death involving wildland fires. Other projects within a 1-mile vicinity would be subject to similar protective laws and regulations and potential impacts would be minimized. In the long-term, new developments decrease wildfire hazards by removing high fire fuel. Therefore, the Proposed Project would not contribute to a cumulatively considerable impact related to wildfire hazards.

4.18.9 Hydrology and Water Quality

Hydrology and water quality impacts are generally site specific because each project site has a different set of physical considerations. As described in Section 4.9, Hydrology and Water Quality, construction of the Proposed Project would result in temporary ground disturbance that could cause a temporary degradation of water quality. The Proposed Project would have a less than significant impact on increasing stormwater runoff or erosion, depleting groundwater supplies or interfering with groundwater recharge, putting a greater number of people and structures within areas at risk of dam or levee inundation, or resulting in degraded water quality. Implementation of SWPPPs, associated BMPs, and the WEAP would minimize impacts on water quality from erosion, accidental spills, and other potential water quality impacts during construction. Projects considered in the cumulative impact analysis that are located on sites larger than 1 acre would be subject to a Construction General Permit, which would require development and implementation of SWPPPs. Additionally, these cumulative projects would be

required to undergo environmental reviews that would identify project-specific potential impacts (related to hydrology and water quality) and mitigation measures in order to reduce these impacts. The cumulative projects presumably would be required to implement construction BMPs similar to those for the Proposed Project. Therefore, construction of the Proposed Project would not contribute to a cumulatively considerable impact related to hydrology and water quality.

O&M of the Proposed Project would result in an increase in the total impermeable surfaces within the Proposed Project area; however, this increase would represent an insignificant portion of the entire right-of-way and would not substantially interfere with groundwater recharge. The increase in net impervious surface would, therefore, not substantially interfere with groundwater recharge to the extent that a net deficit in aquifer volume or a lowering of the local ground water table would occur. Projects considered in the cumulative analysis would be required to comply with federal, state, and local regulations which would ensure that cumulative groundwater recharge impacts would be reduced or avoided to the maximum extent possible. Therefore, O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to hydrology and water quality.

4.18.10 Land Use and Planning

Construction and O&M of the Proposed Project would not create new physical barriers or physically divide an established community, or conflict with applicable plans, policies, or regulations of an agency with jurisdiction over the Proposed Project. No land use impacts would occur. The cumulative projects listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project would be subject to separate environmental review in accordance with CEQA, and would be evaluated for consistency with applicable local and regional plans, policies, and regulations. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to land use and planning.

4.18.11 Mineral Resources

Construction and O&M of the Proposed Project would not result in the loss of known mineral resources; no impacts on mineral resources would occur. Other projects considered in the cumulative analysis would not be located within active mining areas. The cumulative projects are not anticipated to significantly affect the exploration or extraction of mineral resources. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to mineral resources.

4.18.12 Noise

Construction and O&M of the Proposed Project would not result in significant impacts related to noise. Other projects considered in the cumulative analysis listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project may generate noise during construction; however,

the noise generated by the Proposed Project would occur intermittently over 16 months and typically would not exceed 10 days at any given location. Therefore, construction of the Proposed Project would not contribute to a cumulatively considerable impact related to noise.

Operation of the cumulative projects may result in an increase in ambient noise levels resulting from increased traffic levels. However, the noise resulting from O&M of the Proposed Project would be less than significant and would be generated by routine, short-term inspection and maintenance of its facilities. Therefore, O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to noise.

4.18.13 Population and Housing

Construction and O&M of the Proposed Project would have no impact on population and housing. The Proposed Project would not include building new homes or businesses, or any increase in infrastructure in a manner that would lead to substantial population growth in the area.

As described in Section 4.13, Population and Housing, construction workers working on the Proposed Project would be drawn from the local labor pool. The Proposed Project may require temporary accommodations for construction workers during construction, and this need is anticipated to be met by hotels and motels in the vicinity of the Proposed Project. The Proposed Project would be unattended and remotely operated, requiring only occasional visits for routine maintenance and emergency repair. No new housing would need to be constructed for temporary construction workers or for personnel during Proposed Project O&M.

The projects listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project include construction of new residential units which would increase the amount of housing available in the Proposed Project area, and could accommodate increases in population. Construction and O&M of these cumulative projects would not induce substantial direct or indirect population growth in the area beyond what is planned or forecasted in the applicable city and county general plans. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to population and housing.

4.18.14 Public Services

Construction of the Proposed Project would be temporary and short term in nature and would not affect the provision of existing emergency services or require the provision of public services beyond existing capabilities.

O&M of the Proposed Project would not directly induce growth or create a need for the expansion or construction of new fire and police protection, schools, libraries, hospitals, or other public facilities. The projects listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project include construction of new commercial and residential units which would increase the demand for fire and emergency response services, however that demand would not result in a need for new or expanded emergency services in the area beyond what is planned or

forecasted in the applicable city and county general plans. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to public services.

4.18.15 Recreation

Construction of the Proposed Project would have short-term effects on recreational access to existing trails, Class I Bike Paths, Class II Bike Lanes, and pedestrian sidewalks, but the impact would be less than significant. O&M of the Proposed Project would not require the construction or expansion of recreational facilities, and no impact would occur. Recreational facility use could increase incrementally with the cumulative projects listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project; however, compliance with open space/recreation requirements for future cumulative development would ensure that impacts on recreation resources would not be cumulatively considerable. Impacts to recreation caused by construction and O&M of the cumulative projects would be addressed by the respective local agencies during each project's CEQA process. Therefore, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to recreation.

4.18.16 Transportation and Traffic

The addition of Proposed Project traffic may have a temporary impact on local streets, highways (State Route [SR] 74 and SR-79), Class I Bike Paths, Class II Bike Lanes, pedestrian sidewalks, and trails. SCE would implement APM TRA-1 and APM TRA-2 to reduce potential impacts due to construction traffic and disruption. The cumulative projects listed in Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project could generate traffic during construction similar to the Proposed Project (such as road or lane closures); however, construction traffic would occur for a short period of time and coordination with local agencies likely would occur. Therefore, construction of the Proposed Project would not contribute to a cumulatively considerable impact related to transportation and traffic.

Operation of the cumulative projects may result in an increase in traffic from their development. However, traffic associated with the Proposed Project for O&M activities would generate negligible vehicle trips and would be less than significant. Therefore, O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to transportation and traffic.

4.18.17 Utilities and Service Systems

Construction of the Proposed Project would not require the construction or expansion of other existing utilities and service systems; impacts on utilities and service systems would be less than significant. O&M of the Proposed Project would not directly induce growth or create a need for the expansion or construction of new wastewater treatment, stormwater drainage, sanitary landfill, or other utility and service systems facilities. Given that the Proposed Project would

have either no impact or less than significant impacts on utilities and service systems, construction and O&M of the Proposed Project would not contribute to a cumulatively considerable impact related to utilities and service systems.

4.18.18 List of Cumulative Projects

The list of cumulative projects was established using information contained in a Riverside County database and applying a set of screening criteria to identify related projects located within 1 mile of the Proposed Project. The following criteria were used to eliminate certain projects from further consideration:

- Outside of 1-mile project buffer
- An expiration or completion date before January 2014 (the date of database review)
- An application date prior to the last 10 years (before January 2004)

After this initial screening, the remaining projects were assessed by parcel and grouped into larger plans, such as Specific Plans. In addition, construction of the Proposed Project is anticipated to commence in 2018 and occur for approximately 16 months, with an expected operation date of 2020. Based on this information, the timeline established for consideration of cumulative projects and determination of cumulative impacts is 2017 to 2021 (i.e., one year before Proposed Project construction and one year after Proposed Project completion). This criterion was applied to planned future SCE projects over 50 kV. Therefore, any project identified using the above screening criteria and that falls within this timeline has been included in the cumulative analysis.

The cumulative projects list represents planned or approved projects within a 1-mile buffer from the following Proposed Project components: the Proposed 115 kV subtransmission line; six potential material staging yards, and, substation modifications proposed at SCE's existing Valley 500/115 kV Substation. Telecommunication equipment proposed for installation at SCE's existing Triton 115/12 kV Substation, located in the City of Temecula, would occur over a two-day duration, within the existing substation footprint, and would not result in ground-disturbing activities or use of off-road construction equipment. Therefore, activities associated with this Proposed Project component are not expected to contribute to the Proposed Project's cumulative impacts. Therefore, the cumulative projects list does not include projects within a 1-mile buffer of SCE's existing Triton 115/12 kV Substation.

Table 4.18-1 Cumulative Projects Within 1 Mile of the Proposed Project

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
Riverside County						
1	Rancho Bella Vista Specific Plan (TR36376 and TR31871)	Specific Plan	Located 1.2 miles east of Winchester Road, north of Murrieta Hot Springs Road, and adjacent to and west of Pourroy Avenue	0.03	The Rancho Bella Vista Specific Plan has been approved by Riverside County; grading permits have been issued by Riverside County.	--
2	French Valley Specific Plan (TR30696 and TR32289)	Specific Plan	Located north of Los Alamos Road, east of Briggs Road, south of Keller Road, and west of Leon Road	0.07	The French Valley Specific Plan has been approved by Riverside County; grading and commercial permits have been issued by Riverside County.	--
3	TR30433 and MS 4089	Residential and Street/Drainage/Water/Sewage Improvements	Located south of Pat Road, east of Briggs Road, west of Lasker Lane, and north of Baxter Road	0.76	The tentative tract map and improvement agreements have been approved by Riverside County; grading permits have been issued by Riverside County.	--
4	Farmer Boys Restaurant	Commercial	Located at the corner of Benton Road and SR-79	0.39	A commercial grading permit has been issued by Riverside County.	--
5	Dutch Village Specific Plan (TR31330)	Specific Plan	Located north of Auld Road and east of Leon Road	0.37	The Dutch Village Specific Plan has been approved by Riverside County; grading permits have been issued by Riverside County.	--

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
6	Crown Valley Village Specific Plan (TR28695)	Specific Plan	Located south of Auld Road, west of Pourroy Road, and north of the Rancho Bella Vista Specific Plan.	0.92	The Crown Valley Village Specific Plan has been approved by Riverside County; grading permits have been issued by Riverside County.	--
7	TR31118	Residential	Located north of Jean Nicholas Road, south of Dana Drive, and east of Leon Road	0.42	Grading permits have been issued by Riverside County.	--
8	157564	Fish hatchery	Assessor Parcel Number (APN) 461-140-050	0.36	A commercial permit has been issued by Riverside County.	--
9	413629	Add storage to manufacturing plant	APN 331-220-014	0.11	A commercial permit has been issued by Riverside County.	--
10	TR32185	Residential	Located north of Cookie Road, south of Ruff Road, east of Leon Road, and west of Elliot Road and Winchester Road (SR 79)	0.34	A grading permit has been issued by Riverside County.	--
11	46006	Agriculture lab building	APN 461-140-049	0.21	A commercial permit has been issued by Riverside County.	--
12	73598	Commercial	APN 459-274-005	0.83	A commercial permit has been issued by Riverside County.	--

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
13	Church (BGR130072)	Grading for a church	APN 480-040-044	0.63	A grading permit has been issued by Riverside County.	--
14	Perris Union High School District (PUHSD) High School No. 4	High school	Located at the southeast corner of Leon Road and Wickerd Road	0	PUHSD is beginning planning for a third high school serving the City of Menifee.	--
City of Menifee						
15	2014-069 DA	Development agreement for a shopping center "Heritage Square"	Located at the northwest corner of McCall Boulevard and Menifee Road	0.88	Application active as of 3/5/2014	--
16	2013-146 PP	Revised plot plan for SCE Control Building	Entirely within Valley 500/115 kV Substation	0	Application active as of 8/1/2013	--
17	2014-018PP	New bridge at Heritage Lakes	APN 333-180-029	0.28	Application active as of 2/7/2014	--
18	2013-205PM	Subdivide 4.55 acres on Palomar Road into four lots	APN 329-070-079	1.09	Application active as of 10/7/2013	--
19	2012-195 CUP	Conditional Use Permit No. 2012-195 proposes the construction and operation of a tire shop and recycling center	APN 331-110-010	1.50	Application active as of 12/21/2012	--
20	CZ2009-023	Change of Zone - from CPS/R-1 to SP	APNs 333-020-003, -004, -006, -007; and 333-030-009	1.04	Application active as of 2/13/2009	--
21	2011-119 PP	Facility for the collection, storage and transport of recyclable materials	APN 331-150-017	1.07	Application active as of 9/16/2011	--

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
22	2013-204PP	Kennel for doggie day care	APN 331-371-002	1.49	Application active as of 10/7/2013	--
23	2009-110 CUP	North County Sand and Gravel	APNs 331-110-023 and -039	1.42	Application active as of 7/29/2009	--
City of Murrieta						
24	Metro PCS (MCUP-011-3066)	Commercial (Conditional Use Permit to co-locate six panel antennas and one 2-foot-diameter dish antenna onto the existing pole)	APN 963-060-031	0.50	A conditional use permit is in process by the City of Murrieta.	--
City of Perris						
25	08-01-0007	Develop a concrete tilt-up building totaling 3.2 million square feet on 217 acres	Located at the northeast corner of Redlands Avenue and Ellis Avenue	0.20	The project was approved on 7/13/2010 by the City of Perris.	--
26	10-01-0008	Proposal to construct a 43,000-square foot commercial center on 5 acres	Located on northwest corner of San Jacinto Avenue and Redlands Avenue	0.77	The project was approved on 6/29/2010 by the City of Perris.	--
27	13-01-0007	The modified project will increase the residential units from 19 to 40 and reduce the commercial component from 17,000 square feet to 1,000 square feet for retail and 2,000 square feet for a day care facility requiring a Conditional Use Permit	Located on the corner of D Street and 10th Street	0.54	The project was approved on 2/20/2013 by the City of Perris.	--
28	33549	127 residential lot subdivision	Located on the northeast corner of Perris Boulevard and Commercial Street	0.16	The final map of the project was approved by the City of Perris.	--

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
29	06-0337	Develop a 484,300-square-foot commercial retail shopping center on 58.8 acres	Located at the southeast corner of Interstate 215 and Ethanac Road	0.61	The project was approved on 4/16/2008 by the City of Perris.	--
City of Temecula						
30	Roripaugh Ranch	Specific Plan	APN 964-180-013	0.02	The Specific Plan has been approved by the City of Temecula.	--
31	Seraphina	Residential	Located on the north side of Nicolas Road and east side of Joseph Road	0.01	Tentative tract map has been approved by the City of Temecula.	--
32	Walcott Estates	Residential	Located on the west side of Butterfield Stage Road, east of Walcott Lane, north of La Serena, and south of Calle Chapos	0.96	Tentative tract map has been approved by the City of Temecula.	--
SCE Projects						
33	PIN 4087	Install neutral impedance on transformers	Entirely within Valley 500/115 kV Substation	0	Active	2017
34	PIN 6446	Install Phasor Measurement Unit	Entirely within Valley 500/115 kV Substation	0	Active	2018
35	PIN 6092	Minor amount of 115 kV switchrack reconfiguration	Entirely within Valley 500/115 kV Substation	0	Active	2018
36	PIN 6197	Install Dissolved Gas Analysis equipment and bushing monitoring on transformers	Entirely within Valley 500/115 kV Substation	0	Active	2017

Map ID No.	Project Name/ ID No.	Project Description	Location	Proximity to Proposed Project (Miles)	Status	Anticipated Construction Schedule
37	PIN STL26578	Replace TSP and reconfigure Auld-Moraga #2, Valley-Triton, and Pauba-Triton Subtransmission Lines	Located on south side of Nicolas Road west of Triton 115/12 kV Substation	0	Active	2021

Notes:

[1] Cumulative projects with construction dates denoted with "—"are either unknown or not available from the local jurisdiction.

[2] The cumulative projects listed under the City of Perris are all located over 1 mile from the Proposed Project. However, they are included in this table as they are all located within 1 mile of the material staging yards. Specifically, cumulative project no. 08-01-0007 is located 0.20 of a mile from Material Staging Yard 3, cumulative project no. 10-01-0008 is located 0.77 of a mile from Material Staging Yard 3, cumulative project no. 13-01-0007 is located 0.54 of a mile from Material Staging Yard 3, cumulative project no. 33549 is located 0.16 of a mile from Material Staging Yard 3, and cumulative project no. 06-0337 is located 0.61 of a mile from Material Staging Yard 4.

[3] Some of the cumulative projects listed under the City of Menifee are located over 1 mile from the Proposed Project. However, they are included in this table as they are located within 1 mile of Material Staging Yard 4. Specifically, cumulative project no. 2013-205PM is located 0.82 of a mile from Material Staging Yard 4, cumulative project no. 2012-195 CUP is located 0.40 of a mile from Material Staging Yard 4, cumulative project no. CZ2009-023 is located 0.91 of a mile from Material Staging Yard 4, cumulative project no. 2011-119 PP is located 0.05 of a mile from Material Staging Yard 4, cumulative project no. 2013-204PP is located 0.41 of a mile from Material Staging Yard 4, and cumulative project no. 2009-110 CUP is located 0.39 of a mile from Material Staging Yard 4.

Section 4.19
Growth-Inducing Impacts

4.19 Growth-Inducing Impacts

An analysis of growth-inducing impacts was conducted for the Valley South 115 kilovolt Subtransmission Project (Proposed Project). This analysis addressed the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment in accordance with the California Environmental Quality Act Guidelines Section 15126.2(d). Please refer to Section 5.3, Growth Inducing Impacts, for more information regarding how construction and operation of the Proposed Project would not result in growth-inducing impacts.

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Chapter 5
Detailed Discussion of Significant Impacts

In accordance with the Proponent's Environmental Assessment (PEA) Checklist issued by the California Public Utilities Commission (CPUC) and Section 15126.2 of the California Environmental Quality Act (CEQA) Guidelines, this section:

1. Discusses the Applicant Proposed Measures (APMs) that Southern California Edison (SCE) is proposing in order to avoid, minimize, or mitigate potentially significant effects.
2. Discusses the alternatives that were considered in determining the Valley South 115 kilovolt (kV) Subtransmission Project (Proposed Project) and the justification for the selection of the Alternative Project.
3. Describes any growth-inducing impacts associated with the Proposed Project.
4. Identifies the measures that SCE incorporated into the Proposed Project to address potentially significant greenhouse gas (GHG) emissions, if applicable.
5. Discusses energy conservation measures aimed at reducing the inefficient, wasteful, and unnecessary consumption of energy.

5.1 Applicant Proposed Measures Proposed to Minimize Significant Effects

Based on the findings in Chapter 4 – Environmental Impacts Assessment Summary, the Proposed Project is likely to result in a significant and unavoidable impact to aesthetics, associated with Key Observation Point (KOP) 8 (SCE was not able to identify any APMs that would reduce that impact to less than significant). SCE plans to implement 16 APMs during construction and/or Operations and Maintenance (O&M) of the Proposed Project to reduce or avoid impacts to air quality, biology, cultural, and transportation resources. Two additional APMs would apply to the Alternative Project only (APMs CUL-ALT-1 and CUL-ALT-2). Table 5-1 Summary of Applicant Proposed Measures for the Proposed Project and Alternative Project lists these APMs, as well as the justification for each.

5.2 Description of Project Alternatives and Impact Analysis

This section identifies and compares the construction and operation of SCE's Proposed Project with its alternatives. Section 15126.6 (d) of the CEQA Guidelines requires that an Environmental Impact Report (EIR) include "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project." Although a PEA document is not an EIR, this section summarizes the relative impact of each alternative to the preferred alternative for each CEQA environmental issue area.

The Proposed Project objectives are as follows:

- Provide safe and reliable electrical service
- Add capacity to serve long-term forecasted electrical demand requirements in the Electrical Needs Area (ENA) as soon as possible after receipt of applicable permits
- Maintain or improve system reliability and provide greater operational flexibility within the ENA
- Meet Proposed Project needs while minimizing environmental impacts
- Design and construct the Proposed Project in conformance with SCE's approved engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects

These objectives were used to develop a range of reasonable alternatives to the Proposed Project that would feasibly attain most of these objectives.

5.2.1 Electrical System, Substation Site, and Subtransmission Line Route Evaluation Methodology

5.2.1.1 Electrical System Evaluation Methodology

SCE's subtransmission system planning process is designed to ensure that the required capacity and operational flexibility of the subtransmission system are available to safely and reliably meet the projected peak electrical demands under normal and abnormal system configurations.

Power flow analysis of the subtransmission network is performed to determine the adequacy of the existing subtransmission lines to serve the peak electrical demand during both normal and abnormal electrical system configurations. When the projected peak electrical demand exceeds the maximum operating limits of the existing electrical facilities during normal or abnormal configurations, a project is proposed to keep the electrical system within specified loading limits. SCE uses a four-step process to develop system modification alternatives, which is summarized as follows:

1. Perform technical engineering analyses to determine whether modifying electrical equipment at existing facilities could accommodate the forecasted peak electrical demand.
2. If the forecasted peak electrical demand cannot be accommodated by modifying existing electrical facilities, then develop system alternatives that consider new facilities.
3. Evaluate each system alternative with the following considerations:

    - The extent to which the alternative would substantially meet the forecasted peak electrical demand
    - The feasibility of an alternative considering capacity limits, ability to upgrade the system at existing sites, and economic viability

4. If an alternative is not feasible, eliminate it from further consideration. If feasible, the System Alternative is retained for full analysis in the PEA, consistent with the CPUC General Order 131-D.

Table 5.1 Summary of Applicant Proposed Measures for the Proposed Project and Alternative Project

APM Number	Description	Justification
APM AIR-1	Construction crew vehicle speeds on non-public unpaved roadways would be restricted to 15 miles per hour	APM AIR-1 would reduce impact significance related to particulate matter less than 10 microns (PM_{10}) emissions from vehicle transport on non-public unpaved roadways. This APM is applicable when project-related emissions have the potential to exceed CEQA thresholds for PM_{10}, and it is consistent with best available control measures recommended by South Coast Air Quality Management District (SCAQMD) Rule 403, *Fugitive Dust*.
APM AIR-2	Dust suppression would be implemented on all active non-public unpaved access roadways (e.g. using water or chemical suppressant).	APM AIR-2 would reduce impact significance related to PM_{10} emissions from vehicle transport on non-public unpaved roadways. This APM is applicable when project-related emissions have the potential to exceed CEQA thresholds for PM_{10}, and is consistent with best available control measures recommended by SCAQMD Rule 403, *Fugitive Dust*.
APM AIR-3	Off-road diesel construction equipment with a rating between 100 and 750 horsepower would be required to use engines compliant with U.S. Environmental Protection Agency Tier 3 non-road engine standards. In the event a Tier 3 engine is not available, that engine would be equipped with a Tier 2 engine and documentation would be provided from a local rental company stating that the rental company does not currently have the required diesel-fueled off-road construction equipment or that the vehicle is specialized and is not available to rent. Similarly, if a Tier 2 engine is not available, that engine would be equipped with a Tier 1 engine and documentation would be provided.	APM AIR-3 would reduce impact significance related to tail-pipe nitrogen oxides (NO_X) emissions generated during off-road equipment operation. This APM is applicable when project-related emissions have the potential to exceed CEQA thresholds for NO_X, and it is consistent with California Air Resource Board's emission reduction phasing schedule for off-road equipment and SCAQMD recommended CEQA mitigation measures.

APM Number	Description	Justification
APM BIO-1	**Preconstruction Surveys and Construction Monitoring** – Preconstruction biological clearance surveys shall be performed at specific construction and other work sites where potential biological resources are located to minimize impacts on special status wildlife and plant species. If special status species are present, biological monitors shall be on-site, as needed, and shall aid crews in implementing avoidance measures during construction. Special status species observations and avoidance measures will be reported to the appropriate wildlife agencies prior to construction in that area. In addition, appropriate agencies will be provided a monthly report summarizing all special status species observations and avoidance measures.	APM BIO-1 would reduce potential impacts related to significant sensitive biological resources during project construction. This APM is applicable when available data indicates construction activities may occur where biological resources are located, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-2	**Nesting Bird Preconstruction Surveys –** SCE would conduct preconstruction clearance surveys no more than 7 days prior to construction to determine the location of nesting birds and territories. Nesting survey results and avoidance measures, if applicable, will be reported to the appropriate wildlife agencies prior to construction in that area. An avian biologist would establish a buffer area around active nest(s) and would monitor construction activities. The buffer would be established based on construction activities, potential noise disturbance levels, and behavior of the species. A monthly report summarizing all active nest observations and avoidance measures will be provided to the appropriate agencies on a monthly basis, during the nesting season, or until all active nests have been determined to be inactive.	APM BIO-2 would reduce potential impacts related to nesting special status birds during project construction. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable habitat for nesting special status birds, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.
APM BIO-3	**Nesting Bird Management Plan–** SCE shall develop a Nesting Bird Management Plan with input from CDFW. The plan shall include (1) nest management and avoidance; (2) field approach (survey methodology, reporting, and monitoring), including information related to areas of occupied habitat for coastal California gnatcatcher; and (3) avian biologist qualifications. Avian biologist(s) shall be subject to review and approval by CDFW, and shall be responsible for determining the buffer area around active nest(s). Biological monitors shall monitor nests and construction activities.	APM BIO-3 would reduce potential impacts related to nesting special status birds during project construction. By obtaining input regarding planned construction activities and the potential impacts to nesting birds from CDFW prior to the onset of construction, SCE would ensure all potential impacts to nesting special status birds would be reduced to a less than significant level. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable habitat for nesting special status birds, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-4	**Avian Safe Design –** The 115 kV subtransmission structures would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).	APM BIO-4 would reduce impacts to bird species associated with O&M of the Proposed Project. This APM is applicable because the presence of new and modified 115 kV subtransmission structures may cause potential impacts to birds from electrocution and collision. It is designed to reduce the operational risks that result from avian interactions with electric utility facilities, and is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-5	**Stephens' Kangaroo Rat and Los Angeles Pocket Mouse Mitigation and Avoidance -** An SCE qualified biologist shall conduct preconstruction surveys (see APM BIO-1) in suitable habitat for Stephens' kangaroo rat and Los Angeles pocket mouse at specific work areas along the Proposed Project and Alternative Project for impact avoidance and minimization. To address impacts to Stephens' kangaroo rat, within the boundaries of the Stephens' Kangaroo Rat HCP, SCE shall apply to participate in the plan through an agreement with the Riverside County Habitat Conservation Agency (Riverside County, 1996). To address impacts to Los Angeles pocket mouse, within the boundaries of the WRCMSHCP Plan Area, SCE shall apply to participate in the WRCMSHCP and shall follow provisions of the WRCMSHCP as they apply to this species. Stephens' kangaroo rat and Los Angeles pocket mouse observations and avoidance measures will be reported to the appropriate wildlife agencies prior to construction in that area. In addition, appropriate agencies will be provided a monthly report summarizing all special status species observations and avoidance measures.	APM BIO-5 would reduce potential impacts related to Stephens' kangaroo rat and Los Angeles pocket mouse during project construction. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable habitat for Stephens' kangaroo rat or Los Angeles pocket mouse, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-6	**Burrowing Owl Preconstruction Surveys and Monitoring -** A preconstruction nonprotocol burrowing owl survey shall be conducted no more than 30 days prior to commencement of ground-disturbing activities within suitable habitat to determine if any occupied burrows are present. SCE would establish a buffer area around active nest(s) and would monitor construction activities. If occupied burrows or other evidence of presence are found, adequate buffers shall be established around burrows. Adequate buffers shall be 160 feet from occupied wintering burrows (December 1 through January 31) and 250 feet from occupied breeding burrows during the breeding season (February 1 through August 31). A qualified avian specialist may increase or reduce these buffer distances on a case-by-case basis. Biologists shall monitor all construction activities that have the potential to impact active burrows. In addition, potential unavoidable impacts to burrowing owl and its habitat shall be mitigated by participation in the WRCMSHCP. SCE's participation, as a PSE, shall include following the provisions and measures outlined in the WRCMSHCP. All reporting requirements would be conducted as described in APMs BIO-1 and BIO-2.	APM BIO-6 would reduce potential impacts related to burrowing owls during project construction. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable habitat for burrowing owl borrows, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-7	**Coastal California Gnatcatcher Impact Minimization and Mitigation –** Avoidance of active nests shall be accomplished through APMs BIO-2 and BIO-3, described above. In areas of occupied habitat for the coastal California gnatcatcher, a buffer area around active nest(s) would be established by the SCE biologist and provided to USFWS and CDFW for concurrence. The buffer would be established based on construction activities, potential noise disturbance levels, and behavior of the species. Construction activities in occupied habitat/suitable habitat for the coastal California gnatcatcher, will be monitored by a qualified biologist. SCE shall apply to participate in the WRCMSHCP and shall follow provisions of the WRCMSHCP as they apply to coastal California gnatcatcher. Where Proposed Project design allows, SCE shall avoid or minimize impacts to Diegan and coastal sage scrub vegetation. All reporting requirements would be conducted as described in APMs BIO-1 and BIO-2.	APM BIO-7 would reduce potential impacts related to coastal California gnatcatcher during project construction. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable or occupied habitat for coastal California gnatcatcher, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-8	**Listed Riparian Birds Impact Minimization –** Based on current design, SCE shall avoid direct construction impacts to riparian and other wetland habitats suitable for listed riparian bird species (least Bell's vireo, southwestern willow flycatcher). Avoidance of active nests shall be accomplished through APMs BIO-2 and BIO-3, described above. All reporting requirements would be conducted as described in APMs BIO-1 and BIO-2.	APM BIO-8 would reduce potential impacts to riparian and other wetland habitats including associated listed riparian bird species. This APM is applicable when available data indicates construction activities may occur in areas identified with riparian and other wetland habitats and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.
APM BIO-9	**Quino Checkerspot Butterfly Impact Minimization and Mitigation –** To address impacts to Quino checkerspot butterfly, within the boundaries of the WRCMSHCP Plan Area, SCE shall apply to participate in the WRCMSHCP and shall follow the provisions of the WRCMSHCP as they apply to this species. All reporting requirements would be conducted as described in APMs BIO-1 and BIO-2.	APM BIO-9 would reduce potential impacts related to Quino checkerspot butterfly. This APM is applicable when available data indicates construction activities may occur in areas identified with suitable Quino checkerspot butterfly habitat, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM BIO-10	**Vernal Pool Resources –** A qualified biologist shall conduct preconstruction marking of previously mapped basins suitable to support vernal pool species within the potential Proposed Project Impact Corridor and depict them on construction plans with specifications for avoidance. Facts about the vernal pool habitat and potential impacts from construction and O&M activities shall be included in the WEAP materials. Wet season protocol level surveys for special status vernal pool resources will be conducted prior to construction. If special status species are detected, SCE shall follow the provisions of the WRCMSHCP as they apply to these species. All reporting requirements would be conducted as described in APMs BIO-1 and BIO-2.	APM BIO-10 would reduce potential impacts related to vernal pool species. This APM is applicable when available data indicates construction activities may occur in areas identified with previously mapped vernal pool sites, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.
APM CUL-1	Impacts to sensitive paleontological resources would be reduced with implementation of a Paleontological Resources Management Plan.	APM CUL-1 would reduce potential impacts related to significant sensitive paleontological resources during the Proposed Project construction. This APM is applicable when available data indicates construction activities may encounter sensitive paleontological resources during construction, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.

APM Number	Description	Justification
APM CUL-ALT-1	The Alternative Project impact to archaeological resources would be mitigated or reduced to a less than significant level by utilizing one or a combination of standard-practice scenarios, including but not limited to: ▪ Avoidance by design, preservation in place, or capping ▪ Reduction of area of direct impact/effect ▪ Data Recovery	APM CUL-ALT-1 would reduce potential impacts related to significant sensitive archeological resources during construction of the Alternative Project. This APM is applicable when available data indicates construction activities may encounter sensitive archeological resources during construction, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.
APM CUL-ALT-2	Impacts to sensitive paleontological resources would be reduced with implementation of a Paleontological Resources Management Plan.	APM CUL-ALT-2 would reduce potential impacts related to significant sensitive paleontological resources during construction of the Alternative Project. This APM is applicable when available data indicates construction activities may encounter sensitive paleontological resources during construction, and it is consistent with CEQA guidelines for reducing and avoiding potential impacts.
APM TRA-1	Traffic control or other management plans would be prepared where necessary to minimize Proposed Project impacts on local streets, highways (State Route [SR] 74 and SR-79), freeways, or other forms of transportation (Class I and Class II bicycle routes).	APM TRA-1 would reduce potentially significant impacts on local streets, highways (SR-74 and SR-79), freeways, or other forms of transportation (Class I and Class II bicycle routes). This APM is applicable when anticipated project-related impacts may exceed established level of service standards or other established plans, ordinance or policy, and it is consistent with CEQA guidelines for reducing and avoiding impacts.
APM TRA-2	Where the Proposed Project work area encroaches on a public right-of-way (ROW) and reduces the existing pedestrian path of travel to less than 48 inches wide, alternate pedestrian routing would be provided during construction activities.	APM TRA-2 would reduce potentially significant impacts on existing pedestrian sidewalks and/or paths. This APM is applicable when project-related impacts obstruct a public pedestrian ROW, and it is consistent with CEQA guidelines for reducing and avoiding impacts.

5.2.1.2 Subtransmission Line Route Evaluation Methodology

If it is determined that a new electrical infrastructure upgrade or addition is required, SCE considers alternative locations for that infrastructure.

SCE defined a portion of the ENA as the Project Study Area (see Figure 1.2 Electrical Needs Area). The Project Study Area was developed so that a new 115 kV subtransmission line operating within the Project Study Area would maximize electrical benefits to serve the purpose and need for the Proposed Project and be consistent with the basic objectives.

After an evaluation of the Project Study Area, SCE reviewed potential segments in the Project Study Area and identified two potential subtransmission line routes that would connect Valley 500/115 kV Substation to SCE's existing electrical system.

5.2.2 Alternatives Comparison Summary

The following discussion summarizes the components of each alternative and provides a comparison of the benefits provided by each alternative.

5.2.2.1 No Project Alternative

CEQA requires an evaluation of the No Project Alternative so that decision makers can compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project (CEQA Guidelines, Section 15126.6[e]). Under the No Project Alternative no construction and modification of the existing electrical system would occur. Therefore, The No Project Alternative would not meet any of the Proposed Project's objectives because new capacity would not be available to end users in 2020.

5.2.2.2 Electrical System Alternatives

SCE evaluated the following two system modification alternatives for the ability to provide capacity to the ENA.

5.2.2.2.1 System Alternative 1

The existing 115 kV subtransmission lines were evaluated to determine if any upgrades were possible to provide additional line capacity to address the projected overloads of the existing facilities. No upgrades were possible, as all of the primary 115 kV subtransmission lines which serve the ENA (i.e., Valley-Sun City, Valley-Auld, and Valley-Auld-Triton) are already constructed to their maximum operating capacity.

5.2.2.2.2 System Alternative 2

System Alternative 2 would consist of the construction of a new 115 kV subtransmission line originating at SCE's existing Valley 500/115 kV Substation and terminating at one of the existing SCE 115 kV facilities within the Project Study Area.

5.2.2.2.3 Electrical System Alternatives Comparison

System Alternative 1 (Facility Upgrades) is not a feasible option because of the inability to perform any additional electrical system upgrades to increase the capacities of the existing 115 kV subtransmission lines that would be required to meet the peak electrical demand inside and adjacent to the ENA. Therefore, System Alternative 1 is eliminated from further consideration in this PEA.

System Alternative 2 (New Subtransmission Line) would provide the required additional capacity to serve existing and projected peak electrical demand requirements in the ENA on a long-term basis. A new 115 kV subtransmission line would provide the ability to serve the current and projected electrical demand within and adjacent to the ENA for the foreseeable future.

System Alternative 2 would provide the following electrical benefits:

- Addresses the projected overload conditions on the existing Valley-Auld and Valley-Sun City 115 kV Subtransmission Line during abnormal electrical system configurations (e.g., an outage to either the Valley-Auld or the Valley-Sun City 115 kV Subtransmission Lines) through the construction of an additional 115 kV subtransmission line to the ENA
- Addresses the projected overload conditions on the existing Valley-Sun City 115 kV Subtransmission Line during a normal electrical system configuration through the addition of another 115 kV subtransmission line to the ENA
- Increases system reliability and operational flexibility which would result from the additional 115 kV subtransmission line and the corresponding decrease in loading of the existing 115 kV subtransmission lines

The No Project Alternative would not meet SCE's basic objectives as described in Section 2.2, Project Objectives, and would result in a reduced level of reliability and operational flexibility. Therefore, the No Project Alternative is eliminated from further consideration in this PEA.

Since System Alternative 2 meets the Project Objectives, it has been selected as the preferred System Alternative to provide the required capacity increase to serve the ENA.

5.2.2.3 Substation Site Alternatives

This section is Not Applicable to the Proposed Project.

5.2.2.3.1 Site Alternative A

This section is Not Applicable to the Proposed Project.

5.2.2.3.2 Site Alternative B

This section is Not Applicable to the Proposed Project.

5.2.2.4 Transmission Line Route Alternatives

This section is Not Applicable to the Proposed Project.

5.2.2.4.1 Transmission Line Route Alternative 1

This section is Not Applicable to the Proposed Project.

5.2.2.4.2 Transmission Line Route Alternative 2

This section is Not Applicable to the Proposed Project.

5.2.2.5 Subtransmission Line Route Alternatives

SCE evaluated various subtransmission line route alternatives using the methodology described in *Section 5.2.1.2 Substation Site and Subtransmission Line Route Evaluation Methodology.* Approximately 100 subtransmission line route combinations were eliminated due to constraints related to construction, engineering, electrical, environmental, public input, proximity to Caltrans highways and airport runways. The following three subtransmission line route alternatives were evaluated.

5.2.2.5.1 Subtransmission Line Route Alternative 1

Subtransmission Line Route Alternative 1 consists of Segments 1 and 2 and is 15.4 miles in total length. Subtransmission Line Route Alternative 1 is located within unincorporated Riverside County and the cities of Menifee, Murrieta, and Temecula (Figure 4.0 Segment 1 and Segment 2 Locations). Segment 1 of Subtransmission Line Route Alternative 1 involves construction of a new 115 kV subtransmission line originating at SCE's existing Valley 500/115 kV Substation and connecting at a tubular steel pole (TSP) located at the southeast corner of Leon Road and Benton Road, for a total of 12 miles. Segment 1 of Subtransmission Line Route Alternative 1 would cross through the City of Menifee, unincorporated Riverside County, and a small portion of the City of Murrieta.

Segment 2 of Subtransmission Line Route Alternative 1 involves reconductoring a section of the existing Valley-Auld-Triton 115 kV Subtransmission Line. Segment 2 of Subtransmission Line Route Alternative 1 begins at the TSP located at the southeast corner of Leon Road and Benton Road and continues south to the existing Terminal TSP located on the south side of Nicolas Road, for a total of 3.4 miles. Segment 2 of Subtransmission Line Route Alternative 1 would cross through unincorporated Riverside County and the City of Temecula.

5.2.2.5.2 Subtransmission Line Route Alternative 2

Subtransmission Line Route Alternative 2 would be approximately 19 miles in total length and would extend approximately 4 miles longer than Subtransmission Line Route Alternative 1. Segment 1 of Subtransmission Line Route Alternative 2 would follow a route identical to that of Segment 1 of Subtransmission Line Route Alternative 1 for the first approximately 8 miles, and then would turn west at Scott Road for approximately 2 miles to the intersection of Menifee Road. Segment 1 of Subtransmission Line Route Alternative 2 would continue south on Menifee Road for approximately 3 miles, following an existing 115 kV subtransmission line to the intersection of unimproved Clinton Keith Road. From Clinton Keith Road, it would extend east for approximately 1 mile until its termination point near SCE's Auld 115/12 kV Substation, for a total of approximately 14 miles.

Segment 2 of Subtransmission Line Route Alternative 2 would begin at an existing TSP located east of Auld 115/12 kV Substation and would connect to the existing Valley-Auld-Triton 115 kV Subtransmission Line paralleling Los Alamos Road for approximately 0.5 of a mile until it reaches Briggs Road where it would turn south for approximately 0.5 of a mile. It would then span SR-79 in an easterly direction and parallel Benton Road for approximately 0.5 of a mile before merging with Segment 2 of Subtransmission Line Route Alternative 1. At this location, Segment 2 of Subtransmission Line Route Alternative 2 would follow the same approximately 3 mile route as Segment 2 of Subtransmission Line Route Alternative 1, for a total of 5 miles.

5.2.2.6 Subtransmission Line Route Alternatives Eliminated from Further Consideration

The alternatives listed below are those that have been eliminated from detailed analysis. These alternatives were not included for PEA consideration because they would not meet the basic project objectives, would not be feasible, or would not avoid or substantially reduce potential environmental effects of the Proposed Project.

Using the methodology described in Section 5.2.1.2, Subtransmission Line Route Evaluation Methodology, alternative locations were analyzed within the Proposed Project area located in the cities of Murrieta, Menifee, Temecula, and the surrounding unincorporated communities of southern Riverside County.

5.2.2.6.1 Subtransmission Line Route Alternative 3

Subtransmission Line Route Alternative 3 would exit the south side of the existing Valley 500/115 kV Substation and extend easterly on an unimproved secondary street listed as McLaughlin Road in the Circulation Element of the Riverside County General Plan for approximately 1 mile following the existing SCE Valley-Auld 115 kV Subtransmission Line until it reaches Briggs Road. Subtransmission Line Route Alternative 3 would then extend south on the northern portion of Briggs Road continuing to follow the existing SCE facilities for approximately 1 mile until it reaches Matthews Road. From this intersection, Subtransmission Line Route Alternative 3 travels south-easterly and adjacent to Matthews Road following the existing SCE Valley-MWD-Stetson 115 kV Subtransmission Line for approximately 1 mile until it intersects Grand Avenue. Subtransmission Line Route Alternative 3 then extends east along

Grand Avenue continuing to follow the existing SCE facilities for approximately 0.2 of a mile where it intersects with Leon Road.

Subtransmission Line Route Alternative 3 then extends south on Leon Road for approximately 5 miles until it intersects with Scott Road. Subtransmission Line Route Alternative 3 then continues westerly on Scott Road for approximately 1 mile to the intersection of Briggs Road. Subtransmission Line Route Alternative 3 then extends south on the southern portion of Briggs Road for approximately 3 miles ending near Auld 115/12 kV Substation. Subtransmission Line Route Alternative 3 is approximately 12 miles in length.

Approximately 3 miles of Subtransmission Line Route Alternative 3 is currently double circuited with two existing 115 kV subtransmission lines and the addition of a third 115 kV subtransmission line would likely require that the existing poles be replaced with TSPs to comply with General Order 95 requirements. Subtransmission Line Route Alternative 3 may also require additional rights-of-way in order to accommodate the larger TSPs. System reliability would also be reduced due to the placement of three 115 kV subtransmission lines on the same structures. Additionally, there would be potential significant delay in restoring service during emergency restoration and/or maintenance. Furthermore, with the addition of a third subtransmission line, shorter span lengths may be required as well as taller structures. Because Subtransmission Line Route Alternative 3: (a) would not enhance electrical system reliability and operational flexibility; (b) would not allow the SCE project team to design and construct the project in conformance with SCE's current engineering, design, and construction standards; and (c) would not avoid or substantially reduce potential environmental impacts of the Proposed Project, this alternative was considered and dismissed, and requires no further analysis within Chapters 4 through 6 of the PEA document.

5.2.2.6.2 Subtransmission Line Route Segments

In evaluating potential line routes from Valley 500/115 kV Substation south towards Triton 115/12 kV Substation, SCE attempted to utilize main streets identified in local general plans to extend the new 115 kV subtransmission line south towards Triton 115/12 kV Substation. SCE describes these limited options below. These are also shown in Figure 5.1 Western and Eastern Segments.

Western Segment – Menifee Road and Briggs Road

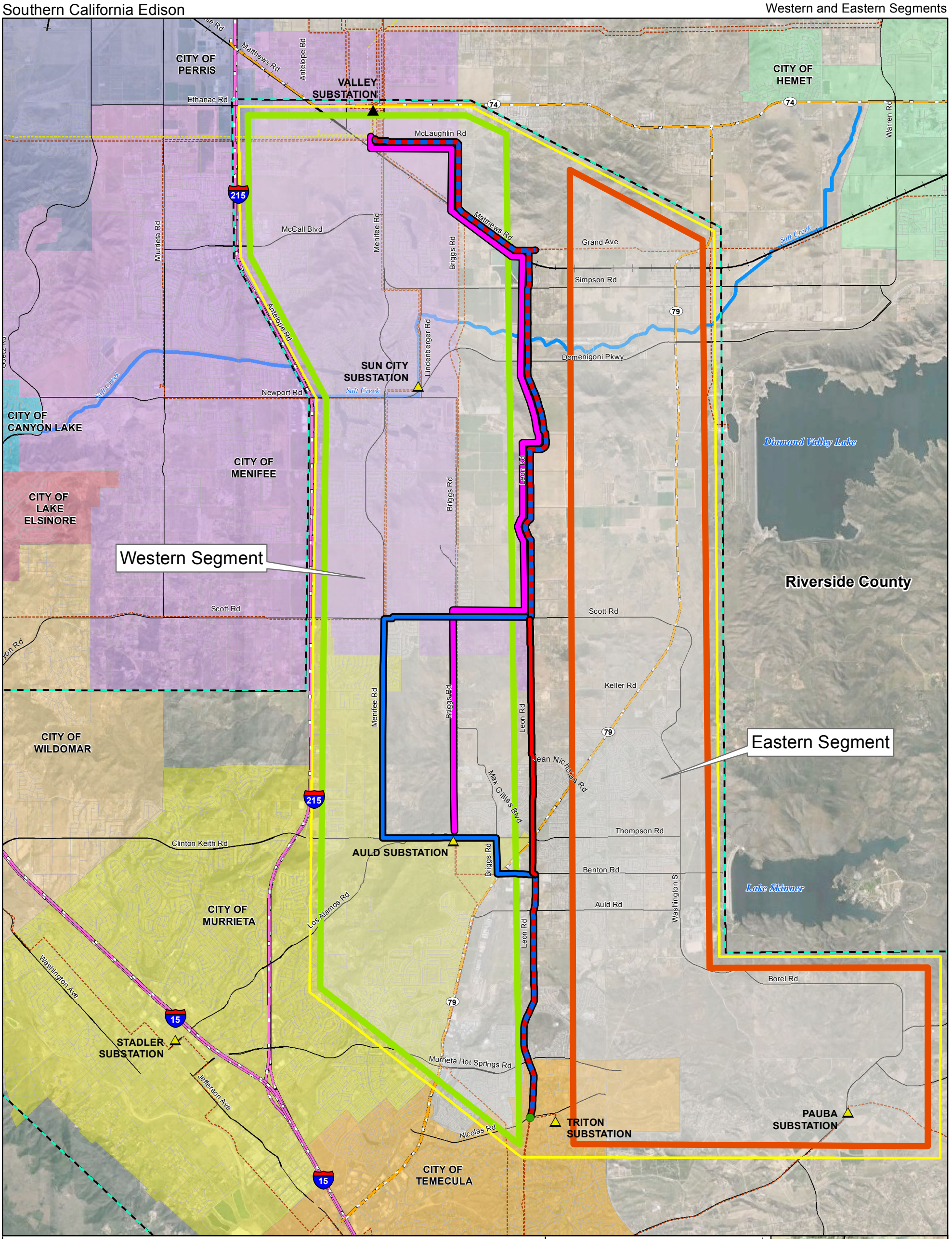
The upper portion of the Western Segment was considered because Menifee Road and Briggs Road were identified in the Riverside County General Plan as main streets and existing SCE infrastructure along those roads are located in close proximity to the Valley 500/115 kV Substation. However, after further analysis, it was concluded infrastructure along Menifee Road (the existing Valley-Sun City and Valley-Newcomb-Skylark 115 kV Lines) was double circuited from Valley 500/115 kV Substation to Simpson Road and Briggs Road was double circuited from Matthews Road to Auld 115/12 kV Substation (the existing Valley-Auld-Triton and Valley-Auld 115 kV Subtransmission Lines). For the reasons explained, the upper portion of the Western Segment was also eliminated from further consideration.

VALLEY SOUTH 115 KV SUBTRANSMISSION PROJECT

FIGURE 5.1

Southern California Edison

Western and Eastern Segments



Proposed Project (Alternative 1)
- Proposed 115 kV Subtransmission Line
- Common to Both

Alternative Project (Alternative 2)
- Alternative 115 kV Subtransmission Line

Alternative 3
- Alternative 115 kV Subtransmission Line

- Study Area
- Eastern Segment
- Western Segment
- Electrical Needs Area

Existing Facilities
- 115 kV Substation
- 500 kV Substation
- Terminal TSP
- Transmission Line
- Subtransmission Line

Sources: SCE, 2014;
Riverside County, 2014;
Aerial Image:
Google Earth Pro, 2014

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Chapter 5

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The lower portion of the Western Segment (Briggs Road and SR-79) was also considered for the reconductor portion of the project along the existing SCE 115 kV subtransmission lines; however, after further analysis, it was concluded a majority of the routes in this vicinity required construction (0.6 of a mile of new construction) along SR-79 and Nicolas Road, which would have required a greater amount of civil work and associated impacts. Additionally, the lower portion of the Western Segment has a greater potential for archeological impacts and there is a greater potential impact to WRCMSHCP criteria cells in the lower Western Segment. Furthermore, visual character/quality was a concern because routes were located in areas where architectural development standards applied. For these reasons, the lower portion of the Western Segment was also dismissed from further consideration.

Eastern Segment – SR-79

The Eastern Segment includes areas on or adjacent to SR-79 which connects with the area on or adjacent to the Proposed Project. However, due to the topography in this area and the location of SR-79, a greater amount of civil work and associated impacts was anticipated. Also, the Eastern Segment has a greater potential for archeological impacts. Additionally, there is a greater potential impact to WRCMSHCP criteria cells and the coastal California gnatcatcher (Polioptila californica californica) in the Eastern Segment. Furthermore, there is additional acreage of Prime, Non-Prime-Non Renewal, and Prime-Non Renewal Farmland within the Eastern Segment. Thus, the Eastern Segment was eliminated from further consideration.

Lower Eastern Segment – Borel Road

Originally, SCE considered a Lower Eastern Segment to the Pauba Substation which would extend in a southeast direction along the western side of Lake Skinner. The land designation surrounding Lake Skinner is designated as Open Space – Conservation which applies to public and private land conserved and managed in accordance with adopted MSHCPs. This area would have greater potential impacts to recreational activities. Additionally, the Lower Eastern Segment would have greater potential impacts to coastal California Gnatcatcher and Quino Checkerspot butterfly (Euphydryas editha quino). Consequently, the Eastern Segment was eliminated from further consideration.

During SCE's analysis of the aforementioned alternatives within the Western and Eastern Segments, SCE determined there were no other suitable project alternatives that would minimize significant environmental impacts of the Proposed Project (Alternative 1). Therefore, the alternatives located within the Western and Eastern Segments that were not selected as part of Alternatives 1 and 2, were eliminated from further consideration.

SCE proposes to construct the Proposed Project utilizing Subtransmission Line Route Alternative 1 (Proposed 115 kV Subtransmission Line). The Proposed Project meets the project objectives and is described in detail in Chapter 3, Project Description.

Subtransmission Line Route Alternative 2 (Alternative 115 kV Subtransmission Line) is evaluated in this PEA as an alternative to the Proposed Project.

5.2.3 Environmental Impacts

5.2.3.1 Substation Site Alternatives Comparison

This section is Not Applicable to the Proposed Project.

5.2.3.2 Transmission Line Route Alternatives Comparison

This section is Not Applicable to the Proposed Project.

5.2.3.3 Subtransmission Line Route Alternatives Comparison

A tabular comparison of the impacts resulting from selection of the proposed and alternative subtransmission line routes is provided in Table 5-2 Comparison of Proposed and Alternative 115 kV Subtransmission Line Routes.

Although various subtransmission route alternatives were considered during the development of the Proposed Project, the Proposed Project was ultimately selected because it best meets the objectives while resulting in the fewest potential environmental impacts.

Construction Impacts

The following discussion describes the resource areas and construction impacts where the Alternative Project would differ from the Proposed Project, along the approximately 6-mile route of Segment 1 of the Alternative Project, from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation, and along the approximately 2-mile route of Segment 2 of the Alternative Project, from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road.

As presented in Table 5-2 Comparison of Proposed and Alternative 115 kV Subtransmission Line Routes (and throughout Chapter 4 of this PEA), construction of the Alternative Project would result in similar but slightly greater environmental impacts for the following resource areas: Aesthetics, Air Quality, Biological Resources, Cultural (Paleontological) Resources, Greenhouse Gases, Hazards and Hazardous Materials, and Hydrology and Water Quality. The proximity of Segment 1 of the Alternative Project to sensitive receptors, and the additional approximately 4-mile linear length of the Alternative Project would result in incrementally greater impacts due to an extended construction timeframe, additional construction materials, and additional construction equipment usage. Impacts to these resource areas would be less than significant, although they would be greater than those associated with the Proposed Project.

In addition, construction of the Alternative Project would result in a substantially greater level of environmental impacts, compared to the Proposed Project, for the following resource areas: Cultural (Archaeological/Historical) Resources, and Noise. Impacts are described below, and presented in Table 5-2 Comparison of Proposed and Alternative 115 kV Subtransmission Line

Routes. While the greater impacts to Cultural Resources could potentially be reduced to a less-than-significant level with incorporation of APMs, the greater noise impact associated with the Alternative Project would not, and would therefore result in an additional significant and unavoidable impact compared to the Proposed Project.

Pole installation during construction of the Alternative Project could impact historical resource CA-RIV-1074, as described in Section 4.5, Cultural and Paleontological Resources. Due to the potential presence of subsurface cultural deposits at pole installation locations, construction activities could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5 of the CEQA Guidelines. However, with implementation of APM CUL-ALT-1, impacts to this resource would be reduced to less than significant.

Construction of the Alternative Project would result in greater noise impacts at locations of noise-sensitive receptors compared to the Proposed Project. The Alternative Project would be located within 50 feet of residences in the City of Murrieta. As shown in Table 4.12-11 Modeled Noise Levels during Wood Pole Installation and Table 4.12-12 Modeled Noise Levels during Tubular Steel Pole Installation the maximum estimated noise level during construction would be 86 A-weighted decibels (dBA) at 50 feet. This noise level would exceed the maximum noise level for construction of 75 dBA for Single-Family Residential and 80 dBA for Multi-Family Residential as shown in Table 4.12-4 City of Murrieta Construction Noise Standards. Based on the proximity to residential receptors, noise impacts during construction of the Alternative Project in the City of Murrieta would be significant and unavoidable.

Operations and Maintenance (O&M) Impacts

The following discussion describes the resource areas and O&M impacts where the Alternative Project would differ from the Proposed Project, along the 5.8-mile route of Segment 1 of the Alternative Project, from the intersection of Scott Road and Leon Road until its termination point near Auld 115/12 kV Substation, and along the first 1.6-mile route of Segment 2 of the Alternative Project, from a TSP located east of Auld 115/12 kV Substation continuing east and southeast until it reaches the TSP located at the southeast corner of Leon Road and Benton Road.

Table 5.2 Comparison of Proposed and Alternative 115 kV Subtransmission Line Routes

CEQA Resource Area	Alternatives			
	Subtransmission Line Route Alternative 1 (Proposed Project)		Subtransmission Line Route Alternative 2 (Alternative Project)	
	Construction	O&M	Construction	O&M
Aesthetics	Less than Significant	Significant and Unavoidable	Greater than the Proposed Project (route would be longer than the Proposed Project, resulting in an overall larger area crossed by the facilities and thus a larger visual footprint); and Similar to the Proposed Project, the Alternative Project has the potential to degrade the existing visual charatecter of a scenic vista and could result in a significant and unavoidable impact	
Agriculture and Forestry Resources	Less than Significant		Similar to the Proposed Project	
Air Quality	Less than Significant with incorporation of APMs	Less than Significant	Greater than the Proposed Project (because of incrementally greater quantity of equipment and vehicles over a longer time period); impacts would be less than significant with incorporation of APMs	

CEQA Resource Area	Alternatives			
	Subtransmission Line Route Alternative 1 (Proposed Project)		Subtransmission Line Route Alternative 2 (Alternative Project)	
	Construction	O&M	Construction	O&M
Biological Resources	Less than Significant with incorporation of APMs. However, if impacts to sensitive habitats, or to the special status species that depend upon those habitats, cannot be avoided or kept to a less than significant level, with the implementation of the APMs, then the Proposed Project would require the development of a Determination of Biologically Equivalent or Superior Plan on a habitat-specific basis.		Similar impacts overall, but greater than the Proposed Project (because of incrementally greater possibility of the inability to avoid some sensitive areas. If impacts to sensitive habitats or species cannot be avoided with the implementation of the APMs, then the Alternative Project would require the development of a Determination of Biologically Equivalent or Superior Plan on a habitat-specific basis).	Similar to the Proposed Project
Cultural Resources (Archaeological /Historical)	Less than Significant		Greater than the Proposed Project (because of the location of a culturally important resource identified within the alignment of the Alternative Project) impacts would be less than significant after mitigation	
Cultural Resources (Paleontological)	Less than Significant with incorporation of APMs	Less than Significant	Slightly Greater than the Proposed Project due to additional area affected	
Geology and Soils	Less than Significant		Similar to the Proposed Project	

CEQA Resource Area	Alternatives			
	Subtransmission Line Route Alternative 1 (Proposed Project)		Subtransmission Line Route Alternative 2 (Alternative Project)	
	Construction	O&M	Construction	O&M
Greenhouse Gas Emissions	Less than Significant		Greater than the Proposed Project (because of an incrementally greater use of on- and off-road equipment during construction); impacts would remain less than significant	Greater than the Proposed Project (because of an incrementally greater use of maintenance vehicles during O&M); impacts would remain less than significant
Hazards and Hazardous Materials	Less than Significant		Greater than the Proposed Project (because of an incrementally greater quantity of hazardous materials over a longer period of time); impacts would remain less than significant	
Hydrology and Water Quality	Less than Significant		Greater than the Proposed Project (route would be longer than the Proposed Project, resulting in additional poles that would require BMP implementation); impacts would remain less than significant	Similar to the Proposed Project
Land Use and Planning	Less than Significant		Similar to the Proposed Project	
Mineral Resources	No Impact		Similar to the Proposed Project	

CEQA Resource Area	Alternatives			
	Subtransmission Line Route Alternative 1 (Proposed Project)		Subtransmission Line Route Alternative 2 (Alternative Project)	
	Construction	O&M	Construction	O&M
Noise	Less than Significant		Greater than the Proposed Project and within 50 feet of residences in the City of Murrieta; impacts would be significant and unavoidable after mitigation	Similar to the Proposed Project
Population and Housing	No Impact		Similar to the Proposed Project	
Public Services	Less than Significant		Similar to the Proposed Project	
Recreation	Less than Significant		Similar to the Proposed Project	
Transportation and Traffic	Less than Significant with incorporation of APMs	Less than Significant	Similar to the Proposed Project	
Utilities and Service Systems	Less than Significant		Similar to the Proposed Project	

As presented in Table 5-2 Comparison of Proposed and Alternative 115 kV Subtransmission Line Routes (and throughout Chapter 4 of this PEA), O&M of the Alternative Project would result in similar but slightly greater environmental impacts for the following resource areas: Aesthetics, Air Quality, Biology, Paleontology, Greenhouse Gases, and Hydrology and Water Quality. Due to the additional approximately 4-mile linear length of the Alternative Project, impacts would result in an incrementally greater impact due to additional material use and additional maintenance vehicles.

In addition, O&M of the Alternative Project would result in substantially greater environmental impacts, compared to the Proposed Project, for Cultural (Archaeological/Historical) Resources. Maintenance vehicles used during O&M of the Alternative Project would traverse two existing access roads across the site, and this could impact historical resource CA-RIV-1074. As a result O&M use of the access roads may cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5 of the CEQA Guidelines. However, with the implementation of APM CUL-ALT-1, any impact on cultural resources would be reduced to less than significant.

5.3 Growth-Inducing Impacts

5.3.1 Would the project either directly or indirectly, foster economic or population growth or the construction of additional housing in the surrounding area?

No Impact. The Proposed Project would have growth-inducing effects if economic or population growth would result from direct and indirect employment needed to construct, operate, and maintain the Proposed Project, necessitating the need for additional housing, and/or if growth would result from the additional electrical power that would be transmitted by the Proposed Project in an unserved or under-served area. Induced growth is any growth that would exceed planned growth and would result from new development that would not have taken place without the implementation of a project.

As discussed in Section 4.13, Population and Housing, construction and O&M of the Proposed Project would not substantially affect employment in the Proposed Project area. SCE would employ up to 67 construction personnel on any given day (See Chapter 3, Project Description). SCE construction crews or contractors would construct the Proposed Project and, in general, would be drawn from the local or regional labor pool. If contractors were employed, they would not cause growth in the Proposed Project area or vicinity of Proposed Project because of the short-term and temporary nature of their employment. The Proposed Project would be unattended; although it would require occasional routine maintenance and emergency repair, it would not require dedicated, full-time personnel.

The Proposed Project has been developed based on a demonstrated need for electrical system reliability and projected electrical demand in the cities of Murrieta, Menifee, Temecula, and portions of unincorporated communities of southern Riverside County. The Proposed Project was not designed to facilitate growth in the community, either directly or indirectly. It would accommodate growth in these cities and Riverside County that has been planned and would be

approved by local land use authorities, but it would not by itself induce growth. No impact would occur.

5.3.2 Would the project remove obstacles to population growth?

No Impact. The Proposed Project would have growth-inducing effects if it would remove obstacles to population growth. The Proposed Project would create additional 115 kV subtransmission line capacity to provide electrical service to portions of unincorporated Riverside County; the cities of Menifee, Murrieta and Temecula, and the greater ENA (see Figure 1.2 Electric Needs Area). However, as discussed above, the Proposed Project would not facilitate growth either directly or indirectly, but would rather accommodate growth in the ENA in response to existing and projected growth and demand. Moreover, it would not result in changes to land use or affect the feasibility of development in the Proposed Project area. It would also not affect development restrictions administered by local agencies. Therefore, the Proposed Project would not remove obstacles to population growth. No impact would occur.

5.3.3 Would the project require the construction of new community facilities that could cause significant environmental effects?

No Impact. The Proposed Project would not require the creation of any community facilities. Construction of the Proposed Project would utilize existing paved and unpaved roads and, therefore, would not result in extending new roads or public services to an area presently not served by roads or public services, including electricity. The Proposed Project has been designed to respond to existing and projected growth and demand trends. No impact would occur.

5.3.4 Would the project encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively?

No Impact. The demand for electricity is a result of, not a precursor to, development in the region. Although the Proposed Project would increase the reliability with which electricity is made available, the objective of the Proposed Project is not to provide a new source of electricity. The Proposed Project would not result in any other activities beyond provision of electricity in response to existing and projected growth and demand. No individual or cumulatively considerable impact would occur.

5.4 Suggested Applicant Proposed Measures to Address GHG Emissions

Since 2010, GHGs have been incorporated into the CEQA Guidelines Appendix G checklist as an additional environmental issue area. Potential GHG impacts resulting from the Proposed Project are discussed within Section 4.7 of this PEA. APM's to address GHG emissions were not

needed to reduce or avoid potentially significant climate change impacts; therefore, additional APMs were not proposed.

5.5 Mandatory Findings of Significance

This section of the PEA provides an analysis of the mandatory findings of significance associated with construction and operation of the Proposed Project and its alternative. In accordance with the CEQA Guidelines Section 15064 (a through h), this PEA section provides substantial evidence that is used to support the determination of whether the Proposed Project would result in significant environmental impacts.

5.5.1 Significance Criteria

Appendix G of the CEQA Guidelines provides the criteria used in determining whether project related impacts would be significant. Impacts resulting from the Proposed Project could be considered significant if they have the potential to create substantial impacts when the following questions are considered. Would the Proposed 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?
- 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)?
- Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

5.5.2 Impact Analysis

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

Less Than Significant. As presented in Chapter 4, Environmental Impact Assessment, construction and O&M of the Proposed Project would not degrade the quality of the environment. The impacts on biological resources are discussed in Section 4.4.5, Biological Resources Impact Analysis. Construction and O&M of the Proposed Project would not require substantial clearing of vegetation or impacts on wildlife habitat. Any placement of fill in waterways would comply with federal and state wetlands and waterways regulations, and no

discharges of domestic or industrial effluent would occur that could threaten the survival of a species. In addition, the Proposed Project would not involve construction of a highway, levee, or other major infrastructure that could restrict the range of a species. Therefore, the Proposed Project would not substantially reduce the habitat of a fish or wildlife species, would not cause a fish or wildlife population to drop below self-sustaining levels, would not threaten to eliminate a plant or animal community, and would not reduce the number or restrict the range of a rare or endangered plant or animal. The impacts on cultural resources resulting from construction and O&M of the Proposed Project are discussed in Section 4.5.5, Cultural Resources Impact Analysis. Construction of the Proposed Project may affect paleontological resources, but the construction activities would not eliminate important examples of any major periods of California history or prehistory. Impacts would be less than significant.

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)?

Significant and Unavoidable Impact. As discussed in Section 4.18, Cumulative Analysis, the Proposed Project could have cumulatively considerable agricultural impacts. As described in Section 4.2, Agriculture and Forestry Resources, the Proposed Project would convert 5.3 acres of Farmland to nonagricultural use because of the installation of anchors, the use and maintenance of a permanent unpaved access road, and installation of subtransmission structures. The conversion of Farmland would represent a loss of 0.0012 percent of the approximately 433,859 acres of Farmland identified in Riverside County, and the impact would be less than significant. The Proposed Project would cross three Agricultural Preserve parcels that carry active Williamson Act – Prime Agricultural Land status, known as Sites 1, 2 and 3. The permanent disturbance from installing new structures within Sites 1 and 2 would be approximately 0.74 of an acre, or approximately 0.5 percent of the total area of both parcels.

The reconductoring of approximately 12 existing light weight steel poles within Site 3 would not result in any permanent disturbance within this parcel. Because the Proposed Project would convert such a small percentage of Williamson Act land to non-agricultural use, and would not impair continuing agricultural activities within each parcel, impacts would be less than significant.

Based on a review of the California Department of Conservation Farmland Mapping and Monitoring Program in conjunction with Figure 4.18-1 Planned and Proposed Projects, several large projects would be located in Farmland and would, therefore, have the potential to convert Farmland to non-agricultural use. The Proposed Project itself would not create a significant impact to agricultural resources. But when viewed in combination with other regional projects, it may potentially contribute to a previously identified cumulatively considerable impact associated with the various planned and proposed development projects in the vicinity. There is no feasible mitigation to reduce cumulative impacts to Farmland from these projects.

Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Significant And Unavoidable Impact. As discussed in Chapter 2, Project Purpose and Need and Objectives, SCE has specifically designed the Proposed Project to respond to growth and anticipated electrical demand of the ENA. The Proposed Project would result in benefits that would directly increase the service capacity and efficiency of the public service for the existing and anticipated consumers in the vicinity. Visual resources located at KOP 8, as identified in Section 4.1 Aesthetics, would be the only resource through which the Proposed Project could have a direct significant environmental impact. Although degradation of the visual character would not impact a substantial number of residences, it would potentially impact human beings along this 1-mile section of the Proposed Project. Therefore, the visual impact associated with KOP 8 is considered significant and unavoidable.

Indirectly, the Proposed Project would reduce the electrical load demands on the existing systems, which would in turn increase the safety and reliability of the systems through the anticipated growth phase and during unanticipated natural or man-made events. Overall, the Proposed Project would not be expected to substantially alter the physical environment in a way that results in impacts that would cause substantial adverse effects on human beings, either directly or indirectly (see Section 4.19, Growth-Inducing Impacts); however impacts associated with KOP 8 are considered significant and unavoidable.

5.6 Irreversible and Irretrievable Commitment of Resources

Pursuant to Section 15126.2(c) of the CEQA Guidelines, an EIR must address significant irreversible and irretrievable environmental changes that would be caused by the Proposed Project. These changes include uses of nonrenewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from Project-related accidents.

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and other natural or cultural resources. These resources are irretrievable in that they would be used for this project when they could have been used for other purposes. Human labor is also considered an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

For the construction and O&M of the Proposed Project, most impacts are short-term and temporary in nature. Implementation of the Proposed Project or Alternative Project would not constitute an irreversible or irretrievable commitment of nonrenewable or depletable resources for the materials and energy expended during construction and implementation. Building materials, fuel for construction vehicles and equipment, and other resources would not be reversible or retrievable. Implementation of the Proposed Project or the Alternative Project would not result in the destruction of environmental resources such that the range of potential uses of the environment would be limited. Implementation of the Proposed Project or the

Alternative Project would have short-term effects on natural resources but would not adversely affect the biodiversity in the area. In addition, although implementation of the Proposed Project or the Alternative Project would require the use of minimal amounts of nonrenewable and depletable resources, SCE would attempt to minimize the irreversible or irretrievable commitment of resources through implementation of energy efficiency programs, as described below.

In accordance with the CPUC's Energy Action Plan (as updated in 2008), SCE has implemented several programs designed to encourage energy conservation; distributed generation; and to reduce peak demand through demand response technologies. In addition, SCE's energy efficiency programs significantly contributed to California's goal of reducing greenhouse gas emissions. The results of these programs are described in SCE's Annual Energy Efficiency Reports, and in 2010 included approximately 2.2 billion kilowatt-hours of annualized energy saving, 430 megawatts of peak demand reduction, and $942 million of resource benefits (SCE, 2011).

5.7 References

Avian Power Line Interaction Committee. 2006. Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006. Available at http://www.aplic.org/accomplishments.php.

Department of Homeland Security, 2006. National Infrastructure Protection Plan. Available at: http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf Accessed June 2014

Riverside County, 1996. Riverside County Habitat Conservation Agency. Implementation Agreement for the Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County.

Southern California Edison (SCE), 2011. Southern California Edison Company's (U 338-E) 2011 Annual Report for 2010 Energy Efficiency Programs. Dated May 2, 2011.

United States Court of Appeals for the Ninth Circuit. *San Luis Obispo Mothers for Peace, et. al v. Nuclear Regulatory Commission*. 804 F.2d 523 (9th Cir. 1986).

Chapter 6
Other Process-Related Data Needs

In accordance with the requirements of the California Public Utilities Commission General Order (G.O.) 131-D, a list that includes all parcels within 300 feet of the proposed facilities subject to G.O. 131-D was prepared and is provided below. The list includes the Assessor's Parcel Number, owner's mailing address, and the physical address of each property. The list is intended to allow for future public noticing of all those identified with regard to the Valley South 115 kilovolt Subtransmission Project.

No other process-related data needs were identified for this Proponent's Environmental Assessment (PEA). This PEA contains information responsive to the requirements of G.O. 131-D, Appendix G of the State California Environmental Quality Act Guidelines, and the CPUC's Working Draft Proponent's Environmental Assessment (PEA) Checklist for Transmission Line and Substation Projects, November 2008.

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Table 6.1 Parcels Within a 300-Foot Radius of the Proposed Project

APN	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP CODE	PROPERTY ADDRESS	PROPERTY CITY, STATE, ZIP
466-220-016	8001 IRVINE CENTER DR STE 1550	IRVINE	CA	92618	N/AVAIL	MENIFEE, CA, 92584
466-230-061	32825 LEON RD	WINCHESTER	CA	92596	32825 LEON RD	WINCHESTER, CA, 92596
466-230-062	16310 PORTER AVE	RIVERSIDE	CA	92504	N/AVAIL	WINCHESTER, CA, 92596
472-020-015	30920 PERRINE ST	MENIFEE	CA	92596	30920 PERRINE ST	MENIFEE, CA, 92596
472-020-017	30885 PERRINE ST	MENIFEE	CA	92596	30885 PERRINE ST	MENIFEE, CA, 92596
472-020-018	33509 VIEWPOINT DR	WILDOMAR	CA	92595	33200 WARM SPRINGS WAY	MENIFEE, CA, 92596
472-030-013	33275 LEON RD	WINCHESTER	CA	92596	33275 LEON RD	WINCHESTER, CA, 92596
472-030-014	33295 LEON RD	WINCHESTER	CA	92596	33295 LEON RD	WINCHESTER, CA, 92596
472-060-001	PO BOX 328	WINCHESTER	CA	92596	33080 LEON RD	WINCHESTER, CA, 92596
472-020-016	1433 ABELIA	IRVINE	CA	92606	33111 LEON RD	WINCHESTER, CA, 92596
472-060-003	14524 TRIPLE CROWN PL	NORTH POTOMAC	MD	20878	N/AVAIL	WINCHESTER, CA, 92596
472-020-019	30985 PERRINE ST	MENIFEE	CA	92596	30985 PERRINE ST	MENIFEE, CA, 92596
472-060-005	33170 LEON RD	WINCHESTER	CA	92596	33170 LEON RD	MENIFEE, CA, 92596
472-060-006	PO BOX 377	MURRIETA	CA	92564	33240 LEON RD	WINCHESTER, CA, 92596
472-030-020	2931 GERTRUDE ST	RIVERSIDE	CA	92506	33501 LEON RD	MENIFEE, CA, 92596
472-030-015	33425 LEON RD	MENIFEE	CA	92596	33425 LEON RD	MENIFEE, CA, 92596
472-050-008	30785 VIA LAS ROSAS	MENIFEE	CA	92596	30785 VIA LAS ROSAS	MENIFEE, CA, 92596
472-050-012	30920 CLOWE LN	MENIFEE	CA	92596	30920 CLOWE LN	MENIFEE, CA, 92596
472-080-001	12652 CARMEL COUNTRY RD UNIT 99	SAN DIEGO	CA	92130	33310 LEON RD	WINCHESTER, CA, 92596
472-080-004	33445 FOWLER DR	WINCHESTER	CA	92596	33445 FOWLER DR	WINCHESTER, CA, 92596
472-050-009	28536 CHAPARRAL VIEW DR	MENIFEE	CA	92584	N/AVAIL	MENIFEE, CA, 92596
472-080-005	33450 FOWLER DR	WINCHESTER	CA	92596	33450 FOWLER DR	WINCHESTER, CA, 92596
472-090-001	3161 MICHELSON DR STE 425	IRVINE	CA	92612	N/AVAIL	WINCHESTER, CA, 92596
472-050-014	PO BOX 995	WINCHESTER	CA	92596	33761 LEON RD	MENIFEE, CA, 92596
472-050-016	20263 WENDY LN	MURRIETA	CA	92562	30922 LA RAY LN	MENIFEE, CA, 92596
472-050-020	30985 LA RAY LN	MENIFEE	CA	92596	30985 LA RAY LN	MENIFEE, CA, 92596
472-050-021	33795 LEON RD	MENIFEE	CA	92596	33795 LEON RD	MENIFEE, CA, 92596
472-050-022	33885 LEON RD	MENIFEE	CA	92596	33885 LEON RD	MENIFEE, CA, 92596
480-010-020	6915 E RUTGERS DR	ANAHEIM	CA	92807	N/AVAIL	WINCHESTER, CA, 92596
480-010-021	34235 LEON RD	WINCHESTER	CA	92596	34235 LEON RD	WINCHESTER, CA, 92596
472-050-027	30928 KELLER RD	MENIFEE	CA	92596	30928 KELLER RD	MENIFEE, CA, 92596
472-050-028	30980 KELLER RD	MENIFEE	CA	92596	30980 KELLER RD	MENIFEE, CA, 92596
480-030-001	1331 W BAY AVE	NEWPORT BEACH	CA	92661	N/AVAIL	WINCHESTER, CA, 92596

APN	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP CODE	PROPERTY ADDRESS	PROPERTY CITY, STATE, ZIP
480-030-007	31120 FLOSSIE WAY	WINCHESTER	CA	92596	31120 FLOSSIE WAY	WINCHESTER, CA, 92596
480-030-008	PO BOX 8505	MORENO VALLEY	CA	92552	31080 FLOSSIE WAY	WINCHESTER, CA, 92596
480-010-024	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-010-026	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-030-013	1800 E HWY N # 200	BREA	CA	92821	34445 KOODEN RD	WINCHESTER, CA, 92596
480-030-009	31085 FLOSSIE WAY	WINCHESTER	CA	92596	31085 FLOSSIE WAY	WINCHESTER, CA, 92596
480-020-013	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	SUN CITY, CA, 92586
480-020-014	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	SUN CITY, CA, 92586
480-020-032	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	SUN CITY, CA, 92586
480-040-001	1800 E HWY N # 200	BREA	CA	92821	N/AVAIL	WINCHESTER, CA, 92596
480-040-002	1800 E HWY N # 200	BREA	CA	92821	34625 ARMSTRONG RD	WINCHESTER, CA, 92596
480-040-004	1800 E HWY N # 200	BREA	CA	92821	N/AVAIL	WINCHESTER, CA, 92596
480-040-006	1800 E HWY N # 200	BREA	CA	92821	34755 ARMSTRONG RD	WINCHESTER, CA, 92596
480-040-008	1800 E HWY N # 200	BREA	CA	92821	34765 ARMSTRONG RD	WINCHESTER, CA, 92596
480-642-003	30914 BRISTLY CT	MURRIETA	CA	92563	30914 BRISTLY CT	MURRIETA, CA, 92563
480-610-044	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-642-005	34883 SKYFLOWER DR	MURRIETA	CA	92563	34883 SKYFLOWER DR	MURRIETA, CA, 92563
480-642-006	34871 SKYFLOWER DR	MURRIETA	CA	92563	N/AVAIL	N/AVAIL
480-643-001	34880 SKYFLOWER DR	MURRIETA	CA	92563	34880 SKYFLOWER DR	MURRIETA, CA, 92563
480-643-019	537 E FLORIDA AVE	HEMET	CA	92543	N/AVAIL	N/AVAIL
480-642-004	34895 SKYFLOWER DR	MURRIETA	CA	92563	34895 SKYFLOWER DR	MURRIETA, CA, 92563
480-641-009	30941 BRISTLY CT	MURRIETA	CA	92563	N/AVAIL	N/AVAIL
480-643-002	34892 SKYFLOWER DR	MURRIETA	CA	92563	N/AVAIL	N/AVAIL
480-643-003	34904 SKYFLOWER DR	MURRIETA	CA	92563	34904 SKYFLOWER DR	MURRIETA, CA, 92563
480-643-004	34916 SKYFLOWER DR	MURRIETA	CA	92563	N/AVAIL	N/AVAIL
480-541-018	31026 BRANDING IRON CT	WINCHESTER	CA	92596	31026 BRANDING IRON CT	WINCHESTER, CA, 92596
480-541-024	1671 E MONTE VISTA AVE # N-214	VACAVILLE	CA	95688	N/AVAIL	WINCHESTER, CA, 92596
480-541-019	31038 BRANDING IRON CT	WINCHESTER	CA	92596	31038 BRANDING IRON CT	WINCHESTER, CA, 92596
480-541-017	31005 BRANDING IRON CT	WINCHESTER	CA	92596	31005 BRANDING IRON CT	WINCHESTER, CA, 92596
480-541-016	31017 BRADNING IRON CT	WINCHESTER	CA	92596	31017 BRANDING IRON CT	WINCHESTER, CA, 92596
480-541-015	31029 BRANDING IRON CT	WINCHESTER	CA	92596	31029 BRANDING IRON CT	WINCHESTER, CA, 92596
480-643-017	537 E FLORIDA AVE	HEMET	CA	92543	N/AVAIL	N/AVAIL
480-641-008	5171 CALIFORNIA AVE STE 120	IRVINE	CA	92617	N/AVAIL	N/AVAIL
480-643-005	34928 SKYFLOWER DR	MURRIETA	CA	92563	34928 SKYFLOWER DR	MURRIETA, CA, 92563

APN	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP CODE	PROPERTY ADDRESS	PROPERTY CITY, STATE, ZIP
480-643-006	34940 SKYFLOWER DR	MURRIETA	CA	92563	34940 SKYFLOWER DR	MURRIETA, CA, 92563
480-643-007	34952 SKYFLOWER DR	MURRIETA	CA	92563	N/AVAIL	N/AVAIL
480-643-009	30947 WINDFLOWER LN	MURRIETA	CA	92563	30947 WINDFLOWER LN	MURRIETA, CA, 92563
480-643-010	30935 WINDFLOWER LN	MURRIETA	CA	92563	30935 WINDFLOWER LN	MURRIETA, CA, 92563
480-643-008	30959 WINDFLOWER LN	MURRIETA	CA	92563	30959 WINDFLOWER LN	MURRIETA, CA, 92563
480-643-018	537 E FLORIDA AVE	HEMET	CA	92543	N/AVAIL	N/AVAIL
480-541-025	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	WINCHESTER, CA, 92596
480-541-006	1671 E MONTE VISTA AVE # N-214	VACAVILLE	CA	95688	31016 PINON PINE CIR	WINCHESTER, CA, 92596
480-541-007	31028 PINON PINE CIR	WINCHESTER	CA	92596	31028 PINON PINE CIR	WINCHESTER, CA, 92596
480-541-008	5452 WOODSIDE PL	ALTA LOMA	CA	91737	31040 PINON PINE CIR	WINCHESTER, CA, 92596
480-541-004	31031 PINON PINE CIR	WINCHESTER	CA	92596	31031 PINON PINE CIR	WINCHESTER, CA, 92596
480-541-005	31019 PINON PINE CIR	WINCHESTER	CA	92596	31019 PINON PINE CIR	WINCHESTER, CA, 92596
480-541-003	1671 E MONTE VISTA AVE # N-214	VACAVILLE	CA	95688	31043 PINON PINE CIR	WINCHESTER, CA, 92596
480-480-030	38770 SKY CANYON DR STE B	MURRIETA	CA	92563	N/AVAIL	WINCHESTER, CA, 92596
480-612-013	30952 SNOWBERRY LN	MURRIETA	CA	92563	30952 SNOWBERRY LN	MURRIETA, CA, 92563
480-612-014	30940 SNOWBERRY LN	MURRIETA	CA	92563	30940 SNOWBERRY LN	MURRIETA, CA, 92563
480-612-012	30964 SNOWBERRY LN	MURRIETA	CA	92563	30964 SNOWBERRY LN	MURRIETA, CA, 92563
480-612-011	35034 GOLDTHREAD LN	MURRIETA	CA	92563	35034 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-021	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-612-010	35046 GOLDTHREAD LN	MURRIETA	CA	92563	35046 GOLDTHREAD LN	MURRIETA, CA, 92563
480-611-022	30943 SNOWBERRY LN	MURRIETA	CA	92563	30943 SNOWBERRY LN	MURRIETA, CA, 92563
480-611-023	35061 GOLDTHREAD LN	MURRIETA	CA	92563	35061 GOLDTHREAD LN	MURRIETA, CA, 92563
480-611-024	35073 GOLDTHREAD LN	MURRIETA	CA	92563	35073 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-009	35058 GOLDTHREAD LN	MURRIETA	CA	92563	35058 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-007	35082 GOLDTHREAD LN	MURRIETA	CA	92563	35082 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-008	35070 GOLDTHREAD LN	MURRIETA	CA	92563	35070 GOLDTHREAD LN	MURRIETA, CA, 92563
480-480-028	38770 SKY CANYON DR STE B	MURRIETA	CA	92563	N/AVAIL	WINCHESTER, CA, 92596
480-480-027	35077 BOLA CT	WINCHESTER	CA	92596	35077 BOLA CT	WINCHESTER, CA, 92596
480-480-026	35063 BOLA CT	WINCHESTER	CA	92596	35063 BOLA CT	WINCHESTER, CA, 92596
480-480-025	35049 BOLA CT	WINCHESTER	CA	92596	35049 BOLA CT	WINCHESTER, CA, 92596
480-480-014	35114 BOLA CT	WINCHESTER	CA	92596	35114 BOLA CT	WINCHESTER, CA, 92596
480-480-016	35086 BOLA CT	WINCHESTER	CA	92596	35086 BOLA CT	WINCHESTER, CA, 92596
480-480-017	35072 BOLA CT	WINCHESTER	CA	92596	35072 BOLA CT	WINCHESTER, CA, 92596
480-480-015	35100 BOLA CT	WINCHESTER	CA	92596	35100 BOLA CT	WINCHESTER, CA, 92596

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480-480-006	35095 LONE HILL CT	WINCHESTER	CA	92596	35095 LONE HILL CT	WINCHESTER, CA, 92596
480-611-025	350875 GOLDTHREAD LN	MURRIETA	CA	92563	35085 GOLDTHREAD LN	MURRIETA, CA, 92563
480-611-026	35097 GOLDTHREAD LN	MURRIETA	CA	92563	35097 GOLDTHREAD LN	MURRIETA, CA, 92563
480-611-027	35109 GOLDTHREAD LN	MURRIETA	CA	92563	35109 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-005	35106 GOLDTHREAD LN	MURRIETA	CA	92563	35106 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-006	35094 GOLDTHREAD LN	MURRIETA	CA	92563	35094 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-003	35130 GOLDTHREAD LN	MURRIETA	CA	92563	35130 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-004	35118 GOLDTHREAD LN	MURRIETA	CA	92563	35118 GOLDTHREAD LN	MURRIETA, CA, 92563
480-610-042	35133 GOLDTHREAD LN	MURRIETA	CA	92563	35133 GOLDTHREAD LN	MURRIETA, CA, 92563
480-610-043	35145 GOLDTHREAD LN	MURRIETA	CA	92563	35145 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-002	35142 GOLDTHREAD LN	MURRIETA	CA	92563	35142 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-001	35154 GOLDTHREAD LN	MURRIETA	CA	92563	35154 GOLDTHREAD LN	MURRIETA, CA, 92563
480-612-022	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-480-029	38770 SKY CANYON DR STE B	MURRIETA	CA	92563	N/AVAIL	WINCHESTER, CA, 92596
480-480-013	35128 BOLA CT	WINCHESTER	CA	92596	35128 BOLA CT	WINCHESTER, CA, 92596
480-480-012	35142 BOLA CT	WINCHESTER	CA	92596	35142 BOLA CT	WINCHESTER, CA, 92596
480-480-009	112 MATISSE CIR	ALISO VIEJO	CA	92656	31074 PINTAIL WAY	WINCHESTER, CA, 92596
480-480-007	35109 LONE HILL CT	WINCHESTER	CA	92596	35109 LONE HILL CT	WINCHESTER, CA, 92596
480-480-011	35156 BOLA CT	WINCHESTER	CA	92596	35156 BOLA CT	WINCHESTER, CA, 92596
480-480-010	35170 BOLA CT	WINCHESTER	CA	92596	35170 BOLA CT	WINCHESTER, CA, 92596
480-481-017	31051 PINTAIL WAY	WINCHESTER	CA	92596	31051 PINTAIL WAY	WINCHESTER, CA, 92596
480-481-018	31065 PINTAIL WAY	WINCHESTER	CA	92596	31065 PINTAIL WAY	WINCHESTER, CA, 92596
480-200-018	PO BOX 907	SAN JACINTO	CA	92581	N/AVAIL	WINCHESTER, CA, 92596
480-601-014	30938 PRAIRIE SUN WAY	MURRIETA	CA	92563	30938 PRAIRIE SUN WAY	MURRIETA, CA, 92563
480-602-001	35178 GOLDTHREAD LN	MURRIETA	CA	92563	35178 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-068	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-602-002	35190 GOLDTHREAD LN	MURRIETA	CA	92563	35190 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-003	35202 GOLDTHREAD LN	MURRIETA	CA	92563	35202 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-015	35205 GOLDTHREAD LN	MURRIETA	CA	92563	35205 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-013	35229 GOLDTHREAD LN	MURRIETA	CA	92563	35229 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-014	35217 GOLDTHREAD LN	MURRIETA	CA	92563	35217 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-004	35214 GOLDTHREAD LN	MURRIETA	CA	92563	35214 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-005	35226 GOLDTHREAD LN	MURRIETA	CA	92563	35226 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-006	35238 GOLDTHREAD LN	MURRIETA	CA	92563	35238 GOLDTHREAD LN	MURRIETA, CA, 92563

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480-481-023	38770 SKY CANYON DR STE B	MURRIETA	CA	92563	31013 QUAIL GARDEN CT	WINCHESTER, CA, 92596
480-481-001	34875 POURROY RD APT 2206	WINCHESTER	CA	92596	35189 BOLA CT	WINCHESTER, CA, 92596
480-481-002	35203 BOLA CT	WINCHESTER	CA	92596	35203 BOLA CT	WINCHESTER, CA, 92596
480-481-003	35217 BOLA CT	WINCHESTER	CA	92596	35217 BOLA CT	WINCHESTER, CA, 92596
480-481-014	PO BOX 231	MURRIETA	CA	92564	31106 QUAIL GARDEN CT	WINCHESTER, CA, 92596
480-481-016	31022 QUAIL GARDEN CT	WINCHESTER	CA	92596	31022 QUAIL GARDEN CT	WINCHESTER, CA, 92596
480-481-004	35231 BOLA CT	WINCHESTER	CA	92596	35231 BOLA CT	WINCHESTER, CA, 92596
480-481-005	35245 BOLA CT	WINCHESTER	CA	92596	35245 BOLA CT	WINCHESTER, CA, 92596
480-481-024	PO BOX 907	SAN JACINTO	CA	92581	N/AVAIL	WINCHESTER, CA, 92596
480-602-010	35277 GOLDTHREAD LN	MURRIETA	CA	92563	35277 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-012	35241 GOLDTHREAD LN	MURRIETA	CA	92563	35241 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-011	35253 GOLDTHREAD LN	MURRIETA	CA	92563	35253 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-009	35274 GOLDTHREAD LN	MURRIETA	CA	92563	35274 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-007	1700 W LAS LANAS LN	FULLERTON	CA	92833	35250 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-008	35262 GOLDTHREAD LN	MURRIETA	CA	92563	35262 GOLDTHREAD LN	MURRIETA, CA, 92563
480-602-065	30924 OLYMPIA ROSE DR	MURRIETA	CA	92563	30924 OLYMPIA ROSE DR	MURRIETA, CA, 92563
480-602-066	30936 OLYMPIA ROSE DR	MURRIETA	CA	92563	30936 OLYMPIA ROSE DR	MURRIETA, CA, 92563
480-602-067	30948 OLYMPIA ROSE DR	MURRIETA	CA	92563	30948 OLYMPIA ROSE DR	MURRIETA, CA, 92563
480-582-004	35322 SUMMERHOLLY LN	MURRIETA	CA	92563	35322 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-200-004	31003 JANELLE LN	WINCHESTER	CA	92596	31003 JANELLE LN	WINCHESTER, CA, 92596
480-202-010	31010 JANELLE LN	WINCHESTER	CA	92596	31010 JANELLE LN	WINCHESTER, CA, 92596
480-220-039	PO BOX 907	SAN JACINTO	CA	92581	N/AVAIL	WINCHESTER, CA, 92596
480-581-032	35349 SUMMERHOLLY LN	MURRIETA	CA	92563	35349 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-581-033	35325 SUMMERHOLLY LN	MURRIETA	CA	92563	35325 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-581-031	35361 SUMMERHOLLY LN	MURRIETA	CA	92563	35361 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-009	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-582-005	35334 SUMMERHOLLY LN	MURRIETA	CA	92563	35334 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-006	35346 SUMMERHOLLY LN	MURRIETA	CA	92563	35346 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-007	35358 SUMMERHOLLY LN	MURRIETA	CA	92563	35358 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-008	35370 SUMMERHOLLY LN	MURRIETA	CA	92563	35370 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-580-033	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-581-011	35385 SUMMERHOLLY LN	MURRIETA	CA	92563	35385 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-581-030	35373 SUMMERHOLLY LN	MURRIETA	CA	92563	35373 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-003	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563

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480-582-001	35382 SUMMERHOLLY LN	MURRIETA	CA	92563	35382 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-582-002	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-200-002	31027 JANELLE LN	WINCHESTER	CA	92596	31027 JANELLE LN	WINCHESTER, CA, 92596
480-200-003	31015 JANELLE LN	WINCHESTER	CA	92596	31015 JANELLE LN	WINCHESTER, CA, 92596
480-200-001	31039 JANELLE LN	WINCHESTER	CA	92596	31039 JANELLE LN	WINCHESTER, CA, 92596
480-202-009	31022 JANELLE LN	WINCHESTER	CA	92596	31022 JANELLE LN	WINCHESTER, CA, 92596
480-202-008	31034 JANELLE LN	WINCHESTER	CA	92596	31034 JANELLE LN	WINCHESTER, CA, 92596
480-222-001	31046 JANELLE LN	WINCHESTER	CA	92596	31046 JANELLE LN	WINCHESTER, CA, 92596
480-221-001	31063 JANELLE LN	WINCHESTER	CA	92596	31063 JANELLE LN	WINCHESTER, CA, 92596
480-221-002	31051 JANELLE LN	WINCHESTER	CA	92596	31051 JANELLE LN	WINCHESTER, CA, 92596
480-222-002	31058 JANELLE LN	WINCHESTER	CA	92596	31058 JANELLE LN	WINCHESTER, CA, 92596
480-222-003	31082 JANELLE LN	WINCHESTER	CA	92596	31082 JANELLE LN	WINCHESTER, CA, 92596
480-580-035	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-580-011	30950 STARFIRE CIR	MURRIETA	CA	92563	30950 STARFIRE CIR	MURRIETA, CA, 92563
480-580-012	30962 STARFIRE CIR	MURRIETA	CA	92563	30962 STARFIRE CIR	MURRIETA, CA, 92563
480-580-017	35442 SUMMERHOLLY LN	MURRIETA	CA	92563	35442 SUMMERHOLLY LN	MURRIETA, CA, 92563
480-580-013	30974 STARFIRE CIR	MURRIETA	CA	92563	30974 STARFIRE CIR	MURRIETA, CA, 92563
480-580-034	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-580-016	30953 STARFIRE CIR	MURRIETA	CA	92563	30953 STARFIRE CIR	MURRIETA, CA, 92563
480-580-015	30965 STARFIRE CIR	MURRIETA	CA	92563	30965 STARFIRE CIR	MURRIETA, CA, 92563
480-580-022	30946 GOLDEN ASTER CT	MURRIETA	CA	92563	30946 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-023	30958 GOLDEN ASTER CT	MURRIETA	CA	92563	30958 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-024	30970 GOLDEN ASTER CT	MURRIETA	CA	92563	30970 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-014	30977 STARFIRE CIR	MURRIETA	CA	92563	30977 STARFIRE CIR	MURRIETA, CA, 92563
480-220-037	7916 VIA CALLENDO	CARLSBAD	CA	92009	31099 JANELLE LN	WINCHESTER, CA, 92596
480-220-038	31087 JANELLE LN	WINCHESTER	CA	92596	31087 JANELLE LN	WINCHESTER, CA, 92596
480-220-036	32234 DAISY DR	WINCHESTER	CA	92596	31111 JANELLE LN	WINCHESTER, CA, 92596
480-220-035	31123 JANELLE LN	WINCHESTER	CA	92596	31123 JANELLE LN	WINCHESTER, CA, 92596
480-220-021	35751 DATE PALM ST	WINCHESTER	CA	92596	35751 DATE PALM ST	WINCHESTER, CA, 92596
480-220-022	35739 DATE PALM ST	WINCHESTER	CA	92596	35739 DATE PALM ST	WINCHESTER, CA, 92596
480-220-034	3211 FUTURA PT	THOUSAND OAKS	CA	91362	31135 JANELLE LN	WINCHESTER, CA, 92596
480-220-023	35727 DATE PALM ST	WINCHESTER	CA	92596	35727 DATE PALM ST	WINCHESTER, CA, 92596
480-580-027	30949 GOLDEN ASTER CT	MURRIETA	CA	92563	30949 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-002	30958 MOONFLOWER LN	MURRIETA	CA	92563	30958 MOONFLOWER LN	MURRIETA, CA, 92563

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480-170-010	PO BOX 981623	PARK CITY	UT	84098	N/AVAIL	WINCHESTER, CA, 92596
480-501-010	1 POLARIS WAY STE 100	ALISO VIEJO	CA	92656	N/AVAIL	MURRIETA, CA, 92563
480-501-005	35549 HAWKEYE ST	MURRIETA	CA	92563	35549 HAWKEYE ST	MURRIETA, CA, 92563
480-580-025	30973 GOLDEN ASTER CT	MURRIETA	CA	92563	30973 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-036	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-580-026	30961 GOLDEN ASTER CT	MURRIETA	CA	92563	30961 GOLDEN ASTER CT	MURRIETA, CA, 92563
480-580-003	30970 MOONFLOWER LN	MURRIETA	CA	92563	30970 MOONFLOWER LN	MURRIETA, CA, 92563
480-580-010	29658 CAMINO PEPITA	MENIFEE	CA	92584	N/AVAIL	MURRIETA, CA, 92563
480-580-004	30982 MOONFLOWER LN	MURRIETA	CA	92563	30982 MOONFLOWER LN	MURRIETA, CA, 92563
480-220-020	35746 DATE PALM ST	WINCHESTER	CA	92596	35746 DATE PALM ST	WINCHESTER, CA, 92596
480-220-019	35734 DATE PALM ST	WINCHESTER	CA	92596	35734 DATE PALM ST	WINCHESTER, CA, 92596
480-220-007	31050 BONSAI CIR	WINCHESTER	CA	92596	31050 BONSAI CIR	WINCHESTER, CA, 92596
480-220-018	35722 DATE PALM ST	WINCHESTER	CA	92596	35722 DATE PALM ST	WINCHESTER, CA, 92596
480-220-005	31055 BONSAI CIR	WINCHESTER	CA	92596	31055 BONSAI CIR	WINCHESTER, CA, 92596
480-220-006	31038 BONSAI CIR	WINCHESTER	CA	92596	31038 BONSAI CIR	WINCHESTER, CA, 92596
480-220-008	31062 BONSAI CIR	WINCHESTER	CA	92596	31062 BONSAI CIR	WINCHESTER, CA, 92596
480-501-003	35573 HAWKEYE ST	MURRIETA	CA	92563	35573 HAWKEYE ST	MURRIETA, CA, 92563
480-501-009	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-501-001	35597 HAWKEYE ST	MURRIETA	CA	92563	35597 HAWKEYE ST	MURRIETA, CA, 92563
480-501-002	35585 HAWKEYE ST	MURRIETA	CA	92563	35585 HAWKEYE ST	MURRIETA, CA, 92563
480-501-004	35561 HAWKEYE ST	MURRIETA	CA	92563	35561 HAWKEYE ST	MURRIETA, CA, 92563
480-500-011	35621 HAWKEYE ST	MURRIETA	CA	92563	35621 HAWKEYE ST	MURRIETA, CA, 92563
480-501-008	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-500-013	12865 POINTE DEL MAR WAY STE 200	DEL MAR	CA	92014	N/AVAIL	MURRIETA, CA, 92563
480-502-001	35616 HAWKEYE ST	MURRIETA	CA	92563	35616 HAWKEYE ST	MURRIETA, CA, 92563
480-501-006	35580 HAWKEYE ST	MURRIETA	CA	92563	35580 HAWKEYE ST	MURRIETA, CA, 92563
480-501-007	35592 HAWKEYE ST	MURRIETA	CA	92563	35592 HAWKEYE ST	MURRIETA, CA, 92563
480-170-008	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
480-220-004	31067 BOSAI CIR	WINCHESTER	CA	92596	31067 BONSAI CIR	WINCHESTER, CA, 92596
480-220-003	31079 BONSAI CIR	WINCHESTER	CA	92596	31079 BONSAI CIR	WINCHESTER, CA, 92596
480-502-027	1 POLARIS WAY	ALISO VIEJO	CA	92656	N/AVAIL	MURRIETA, CA, 92563
480-502-002	35628 HAWKEYE ST	MURRIETA	CA	92563	35628 HAWKEYE ST	MURRIETA, CA, 92563
480-502-003	35640 HAWKEYE ST	MURRIETA	CA	92563	35640 HAWKEYE ST	MURRIETA, CA, 92563
480-502-014	35677 SWIFT FOX CT	MURRIETA	CA	92563	35677 SWIFT FOX CT	MURRIETA, CA, 92563

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480-502-015	35672 SWIFT FOX CT	MURRIETA	CA	92563	35672 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-016	35684 SWIFT FOX CT	MURRIETA	CA	92563	35684 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-011	30940 BALD EAGLE ST	MURRIETA	CA	92563	30940 BALD EAGLE ST	MURRIETA, CA, 92563
480-502-013	4454 FORRESTER ST	WAHIAWA	HI	96786	35689 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-012	35701 SWIFT FOX CT	MURRIETA	CA	92563	35701 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-017	35696 SWIFT FOX CT	MURRIETA	CA	92563	35696 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-018	UNIT 3470 BOX 531	DPO	AA	34041	35708 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-019	35720 SWIFT FOX CT	MURRIETA	CA	92563	35720 SWIFT FOX CT	MURRIETA, CA, 92563
480-502-023	30945 BALD EAGLE ST	MURRIETA	CA	92563	30945 BALD EAGLE ST	MURRIETA, CA, 92563
480-502-024	30933 BALD EAGLE ST	MURRIETA	CA	92563	30933 BALD EAGLE ST	MURRIETA, CA, 92563
480-502-022	30957 BALD EAGLE ST	MURRIETA	CA	92563	30957 BALD EAGLE ST	MURRIETA, CA, 92563
480-502-020	30981 BALD EAGLE ST	MURRIETA	CA	92563	30981 BALD EAGLE ST	MURRIETA, CA, 92563
480-502-021	30969 BALD EAGLE ST	MURRIETA	CA	92563	30969 BALD EAGLE ST	MURRIETA, CA, 92563
963-450-012	PO BOX 790830	SAN ANTONIO	TX	78279	N/AVAIL	WINCHESTER, CA, 92596
963-450-018	PO BOX 790830	SAN ANTONIO	TX	78279	N/AVAIL	WINCHESTER, CA, 92596
480-170-002	31401 CAMINO CAPISTRANO STE 1	SAN JUAN CAPO	CA	92675	N/AVAIL	WINCHESTER, CA, 92596
480-100-061	41309 AVENIDA BIONA	TEMECULA	CA	92591	N/AVAIL	MURRIETA, CA, 92563
963-060-052	PO BOX 1175	SAN JUAN CAPO	CA	92693	N/AVAIL	MURRIETA, CA, 92563
963-060-032	505 SANSOME ST STE 1575	SAN FRANCISCO	CA	94111	N/AVAIL	MURRIETA, CA, 92563
963-060-051	PO BOX 1175	SAN JUAN CAPO	CA	92693	N/AVAIL	MURRIETA, CA, 92563
963-060-021	1900 QUAIL ST	NEWPORT BEACH	CA	92660	N/AVAIL	MURRIETA, CA, 92563
963-100-004	1900 QUAIL ST	NEWPORT BEACH	CA	92660	N/AVAIL	WINCHESTER, CA, 92596
963-010-001	FRENCH VALLEY TOWNE CTR # 1	SAN JUAN CAPO	CA	92675	N/AVAIL	N/AVAIL
963-070-024	484 PROSPECT ST	LA JOLLA	CA	92037	30951 BENTON RD	WINCHESTER, CA, 92596
963-010-002	FRENCH VALLEY TOWNE CTR # 1	SAN JUAN CAPO	CA	92675	N/AVAIL	N/AVAIL
963-010-003	FRENCH VALLEY TOWNE CTR # 1	SAN JUAN CAPO	CA	92675	N/AVAIL	N/AVAIL
963-010-004	FRENCH VALLEY TOWNE CTR # 1	SAN JUAN CAPO	CA	92675	N/AVAIL	N/AVAIL
963-080-002	515 S FIGUEROA ST STE 1028	LOS ANGELES	CA	90071	N/AVAIL	MURRIETA, CA, 92563
963-010-005	PO BOX 1175	SAN JUAN CAPISTRANO	CA	92693	N/AVAIL	N/AVAIL
963-070-025	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	MURRIETA, CA, 92563
963-080-013	PO BOX 1180	RIVERSIDE	CA	92502	N/AVAIL	MURRIETA, CA, 92563
963-040-001	6040 S DURANGO DR STE 105	LAS VEGAS	NV	89113	N/AVAIL	WINCHESTER, CA, 92596
963-040-017	5021 E BEAR MOUNTAIN BLVD	BAKERSFIELD	CA	93307	N/AVAIL	MURRIETA, CA, 92563
963-040-002	PO BOX 875	JOLON	CA	93928	31095 AULD RD	MURRIETA, CA, 92563

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963-040-016	15935 MOUNT JACKSON ST	FOUNTAIN VALLEY	CA	92708	N/AVAIL	MURRIETA, CA, 92563
963-050-001	31045 VAN GAALE LN	MURRIETA	CA	92563	31045 VAN GAALE LN	MURRIETA, CA, 92563
963-050-002	28880 VIA NORTE VIS	MURRIETA	CA	92563	N/AVAIL	MURRIETA, CA, 92563
963-080-008	PO BOX 667	WOODLAND HILLS	CA	91365	N/AVAIL	MURRIETA, CA, 92563
963-050-016	37430 LEON RD	MURRIETA	CA	92563	37430 LEON RD	MURRIETA, CA, 92563
963-050-015	36687 VAN GAALE LN	WINCHESTER	CA	92596	31090 ALLEN ST	MURRIETA, CA, 92563
964-080-001	17775 LONG HOLLOW RD # KD	CORNING	CA	96021	37615 LEON RD	MURRIETA, CA, 92563
963-080-009	27431 ENTERPRISE CIR W	TEMECULA	CA	92590	30820 BOREL RD	MURRIETA, CA, 92563
963-080-012	37760 BOREL RD	MURRIETA	CA	92563	N/AVAIL	MURRIETA, CA, 92563
964-080-002	37760 BOREL RD	MURRIETA	CA	92563	37760 BOREL RD	MURRIETA, CA, 92563
957-320-006	11350 MCCORMICK RD # 200	HUNT VALLEY	MD	21031	N/AVAIL	N/AVAIL
964-540-064	980 MONTECITO DR # 302	CORONA	CA	92879	N/AVAIL	MURRIETA, CA, 92563
957-320-007	PO BOX 9017	TEMECULA	CA	92589	N/AVAIL	N/AVAIL
964-540-063	980 MONTECITO DR # 302	CORONA	CA	92879	N/AVAIL	MURRIETA, CA, 92563
964-540-048	38019 TURNING LEAF CT	MURRIETA	CA	92563	38019 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-049	38009 TURNING LEAF CT	MURRIETA	CA	92563	38009 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-046	38039 TURNING LEAF CT	MURRIETA	CA	92563	38039 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-047	38029 TURNIN LEAF CT	MURRIETA	CA	92563	38029 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-005	31019 ROSE ARBOR DR	MURRIETA	CA	92563	31019 ROSE ARBOR CT	MURRIETA, CA, 92563
964-541-006	38010 TURNING LEAF CT	MURRIETA	CA	92563	38010 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-007	38020 TURNING LEAF CT	MURRIETA	CA	92563	38029 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-008	38030 TURNING LEAF CT	MURRIETA	CA	92563	38030 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-009	38040 TURNING LEAF CT	MURRIETA	CA	92563	38040 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-045	38049 TURNING LEAF CT	MURRIETA	CA	92563	38049 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-042	38079 TURNING LEAF CT	MURRIETA	CA	92563	38079 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-043	3806 TURNING LEAF CT	MURRIETA	CA	92563	38069 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-044	38059 TURNING LEAF CT	MURRIETA	CA	92563	38059 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-010	16896 LOLO CIR	FOUNTAIN VALLEY	CA	92708	38050 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-011	38060 TURNING LEAF CT	MURRIETA	CA	92563	38060 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-012	38070 TURNING LEAF CT	MURRIETA	CA	92563	38070 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-013	PO BOX 35	TISDALE SK SOE-1TO CANADA	N/AVAIL	N/AVAIL	38080 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-040	38099 TURNING LEAF CT	MURRIETA	CA	92563	38099 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-041	38089 TURNING LEAF CT	MURRIETA	CA	92563	38089 TURNING LEAF CT	MURRIETA, CA, 92563

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964-540-038	3849 TURNING LEAF CT	MURRIETA	CA	92563	38119 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-039	38109 TURNING LEAF CT	MURRIETA	CA	92563	38109 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-014	31008 OLD CYPRESS DR	MURRIETA	CA	92563	31008 OLD CYPRESS DR	MURRIETA, CA, 92563
964-541-015	31018 OLD CYPRESS DR	MURRIETA	CA	92563	31018 OLD CYPRESS DR	MURRIETA, CA, 92563
964-541-016	31028 OLD CYPRESS DR	MURRIETA	CA	92563	31028 OLD CYPRESS DR	MURRIETA, CA, 92563
964-540-029	38120 TURNING LEAF CT	MURRIETA	CA	92563	38120 TURNING LEAF CT	MURRIETA, CA, 92563
964-541-028	31018 OLIVE KNOLL CT	MURRIETA	CA	92563	31018 OLIVE KNOLL CT	MURRIETA, CA, 92563
964-541-027	31009 OLIVE KNOLL CT	MURRIETA	CA	92563	31009 OLIVE KNOLL CT	MURRIETA, CA, 92563
964-541-026	31068 OLD CYPRESS DR	MURRIETA	CA	92563	31019 OLIVE KNOLL CT	MURRIETA, CA, 92563
964-540-028	PO BOX 890783	TEMECULA	CA	92589	38121 SUMMER RIDGE DR	MURRIETA, CA, 92563
964-540-034	38159 TURNING LEAF CT	MURRIETA	CA	92563	38159 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-036	38139 TUNNING LEAF CT	MURRIETA	CA	92563	38139 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-037	38129 TURNING LEAF CT	MURRIETA	CA	92563	38129 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-035	38149 TURNING LEAF CT	MURRIETA	CA	92563	38149 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-032	26 ROSINGS	MISSION VIEJO	CA	92692	38150 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-030	38130 TURNING LEAF CT	MURRIETA	CA	92563	38130 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-031	38140 TURNING LEAF CT	MURRIETA	CA	92563	38140 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-033	38160 TURNING LEAF CT	MURRIETA	CA	92563	38160 TURNING LEAF CT	MURRIETA, CA, 92563
964-540-012	31018 WATERTON CT	MURRIETA	CA	92563	31018 WATERTON CT	MURRIETA, CA, 92563
964-540-013	31028 WATERTON CT	MURRIETA	CA	92563	31028 WATERTON CT	MURRIETA, CA, 92563
964-540-014	31038 WATERTON CT	MURRIETA	CA	92563	31038 WATERTON CT	MURRIETA, CA, 92563
964-540-015	31048 WATERTON CT	MURRIETA	CA	92563	N/AVAIL	MURRIETA, CA, 92563
964-540-016	31 MOUNT CHRISTIE CT	PORT LUDLOW	WA	98365	31058 WATERTON CT	MURRIETA, CA, 92563
964-540-057	980 MONTECITO DR # 302	CORONA	CA	92879	N/AVAIL	MURRIETA, CA, 92563
964-540-059	17800 CASTLETON ST STE 200	CITY OF INDUSTRY	CA	91748	N/AVAIL	MURRIETA, CA, 92563
964-540-008	31037 WATERTON CT	MURRIETA	CA	92563	31037 WATERTON CT	MURRIETA, CA, 92563
964-540-009	31027 WATERTON CT	MURRIETA	CA	92563	31027 WATERTON CT	MURRIETA, CA, 92563
964-540-007	31047 WATERTON CT	MURRIETA	CA	92563	31047 WATERTON CT	MURRIETA, CA, 92563
964-251-009	31032 ROSE CIR	MURRIETA	CA	92563	31032 ROSE CIR	MURRIETA, CA, 92563
964-251-010	31042 ROSE CIR	MURRIETA	CA	92563	31042 ROSE CIR	MURRIETA, CA, 92563
964-251-011	31052 ROSE CIR	MURRIETA	CA	92563	31052 ROSE CIR	MURRIETA, CA, 92563
964-251-012	31062 ROSE CIR	MURRIETA	CA	92563	31062 ROSE CIR	MURRIETA, CA, 92563
964-540-027	38131 SUMMER RIDGE DR	MURRIETA	CA	92563	38131 SUMMER RIDGE DR	MURRIETA, CA, 92563
957-640-018	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	N/AVAIL	MURRIETA, CA, 92563

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957-640-009	30850 MCGOWANS PASS	MURRIETA	CA	92563	30850 MCGOWANS PASS	MURRIETA, CA, 92563
957-640-008	30862 MCGOWANS PASS	MURRIETA	CA	92563	30862 MCGOWANS PASS	MURRIETA, CA, 92563
957-630-023	30840 LILAC DR	MURRIETA	CA	92563	30840 LILAC DR	MURRIETA, CA, 92563
957-640-007	1661 HANOVER RD STE 211	CITY OF INDUSTRY	CA	91748	30855 MCGOWANS PASS	MURRIETA, CA, 92563
957-640-006	30843 MCGOWANS PASS	MURRIETA	CA	92563	30843 MCGOWANS PASS	MURRIETA, CA, 92563
964-251-016	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	38311 WHISPER OAKS RD	MURRIETA, CA, 92563
964-251-008	31027 ROSE CIR	MURRIETA	CA	92563	31027 ROSE CIR	MURRIETA, CA, 92563
964-251-006	31047 ROSE CIR	MURRIETA	CA	92563	31047 ROSE CIR	MURRIETA, CA, 92563
964-251-007	23316 EAGLE RDG	MISSION VIEJO	CA	92692	31037 ROSE CIR	MURRIETA, CA, 92563
964-251-018	31020 HIDDEN LAKE RD	MURRIETA	CA	92563	31020 HIDDEN LAKE RD	MURRIETA, CA, 92563
964-251-019	223 GENOA ST	ARCADIA	CA	91006	31040 HIDDEN LAKE RD	MURRIETA, CA, 92563
964-251-017	31025 HIDDEN LAKE RD	MURRIETA	CA	92563	31025 HIDDEN LAKE RD	MURRIETA, CA, 92563
964-140-006	980 MONTECITO DR # 302	CORONA	CA	92879	N/AVAIL	MURRIETA, CA, 92563
957-350-012	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	N/AVAIL	MURRIETA, CA, 92563
957-630-029	27349 JEFFERSON AVE STE 101	TEMECULA	CA	92590	N/AVAIL	MURRIETA, CA, 92563
957-630-022	30852 LILAC DR	MURRIETA	CA	92563	30852 LILAC DR	MURRIETA, CA, 92563
957-630-020	30833 LILAC DR	MURRIETA	CA	92563	30833 LILAC DR	MURRIETA, CA, 92563
957-630-021	PO BOX 3265	DANA POINT	CA	92629	30845 LILAC DR	MURRIETA, CA, 92563
957-630-007	30859 WISTERIA LN	MURRIETA	CA	92563	30859 WISTERIA LN	MURRIETA, CA, 92563
957-630-008	30842 WISTERIA LN	MURRIETA	CA	92563	30842 WISTERIA LN	MURRIETA, CA, 92563
957-620-003	30844 E GREEN DR	MURRIETA	CA	92563	30844 E GREEN DR	MURRIETA, CA, 92563
957-630-006	30847 WISTERIA LN	MURRIETA	CA	92563	30847 WISTERIA LN	MURRIETA, CA, 92563
957-630-005	30835 WISTERIA LN	MURRIETA	CA	92563	30835 WISTERIA LN	MURRIETA, CA, 92563
957-620-004	30832 E GREEN DR	MURRIETA	CA	92563	30832 E GREEN DR	MURRIETA, CA, 92563
957-620-011	27349 JEFFERSON AVE STE 101	TEMECULA	CA	92590	N/AVAIL	MURRIETA, CA, 92563
957-620-002	30856 E GREEN DR	MURRIETA	CA	92563	30856 E GREEN DR	MURRIETA, CA, 92563
957-620-001	30868 E GREEN DR	MURRIETA	CA	92563	30868 E GREEN DR	MURRIETA, CA, 92563
957-610-001	30888 CENTRAL PARK DR	MURRIETA	CA	92563	30888 CENTRAL PARK DR	MURRIETA, CA, 92563
957-610-002	30896 CENTRAL PARK DR	MURRIETA	CA	92563	30896 CENTRAL PARK DR	MURRIETA, CA, 92563
957-610-003	30904 CENTRAL PARK DR	MURRIETA	CA	92563	30904 CENTRAL PARK DR	MURRIETA, CA, 92563
957-522-012	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	30893 BOW BRIDGE DR	MURRIETA, CA, 92563
957-611-010	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	N/AVAIL	MURRIETA, CA, 92563
957-522-002	38822 SUGAR PINE WAY	MURRIETA	CA	92563	38822 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-001	30881 CENTRAL PARK DR	MURRIETA	CA	92563	30881 CENTRAL PARK DR	MURRIETA, CA, 92563

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957-522-004	38846 SUGAR PINE WAY	MURRIETA	CA	92563	38846 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-003	38834 SUGAR PINE WAY	MURRIETA	CA	92563	38834 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-005	38858 SUGAR PINE WAY	MURRIETA	CA	92563	38858 SUGAR PINE WAY	MURRIETA, CA, 92563
957-611-001	38811 SUMMIT ROCK LN	MURRIETA	CA	92563	38811 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-002	38835 SUMMIT ROCK LN	MURRIETA	CA	92563	38835 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-003	38847 SUMMIT ROCK LN	MURRIETA	CA	92563	38847 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-004	38859 SUMMIT ROCK LN	MURRIETA	CA	92563	38859 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-005	38871 SUMMIT ROCK LN	MURRIETA	CA	92563	38871 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-522-006	38870 SUGAR PINE WAY	MURRIETA	CA	92563	38870 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-007	38882 SUGAR PINE WAY	MURRIETA	CA	92563	38882 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-008	38894 SUGAR PINE WAY	MURRIETA	CA	92563	38894 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-009	35693 ABELIA ST	MURRIETA	CA	92562	38906 SUGAR PINE WAY	MURRIETA, CA, 92563
957-522-010	38918 SUGAR PINE WAY	MURRIETA	CA	92563	38918 SUGAR PINE WAY	MURRIETA, CA, 92563
957-611-011	38883 SUMMIT ROCK LN	MURRIETA	CA	92563	38883 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-012	22682 BARLOVENTO	MISSION VIEJO	CA	92692	38895 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-008	38907 SUMMIT ROCK LN	MURRIETA	CA	92563	38907 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-611-009	38919 SUMMIT ROCK LN	MURRIETA	CA	92563	38919 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-022	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	N/AVAIL	MURRIETA, CA, 92563
957-610-004	30909 CENTRAL PARK DR	MURRIETA	CA	92563	30909 CENTRAL PARK DR	MURRIETA, CA, 92563
957-610-021	38840 SUMMIT ROCK LN	MURRIETA	CA	92563	38840 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-018	38876 SUMMIT ROCK LN	MURRIETA	CA	92563	38876 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-019	38864 SUMMIT ROCK LN	MURRIETA	CA	92563	38864 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-020	38852 SUMMIT ROCK LN	MURRIETA	CA	92563	38852 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-015	2301 E 4TH ST	LONG BEACH	CA	90814	38912 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-016	38900 SUMMIT ROCK LN	MURRIETA	CA	92563	38900 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-017	38888 SUMMIT ROCK LN	MURRIETA	CA	92563	38888 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-610-014	38924 SUMMIT ROCK LN	MURRIETA	CA	92563	38924 SUMMIT ROCK LN	MURRIETA, CA, 92563
957-510-015	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	N/AVAIL	MURRIETA, CA, 92563
957-510-002	43020 BLACK DEER LOOP STE 202	TEMECULA	CA	92590	30871 BOW BRIDGE DR	MURRIETA, CA, 92563
957-522-011	38930 SUGAR PINE WAY	MURRIETA	CA	92563	38930 SUGAR PINE WAY	MURRIETA, CA, 92563
957-510-016	27101 PUERTA REAL STE 300	MISSION VIEJO	CA	92691	30761 BOW BRIDGE DR	MURRIETA, CA, 92563
957-510-001	30883 BOW BRIDGE DR	MURRIETA	CA	92563	30883 BOW BRIDGE DR	MURRIETA, CA, 92563
957-663-001	PO BOX 1890	GARDEN GROVE	CA	92842	N/AVAIL	N/AVAIL
957-661-002	30866 SANDPIPER LN	TEMECULA	CA	92591	30866 SANDPIPER LN	TEMECULA, CA, 92591

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957-661-003	30876 SANDPIPER LN	TEMECULA	CA	92591	30876 SANDPIPER LN	TEMECULA, CA, 92591
957-661-004	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	39166 SHREE RD	TEMECULA, CA, 92591
957-661-005	39176 SHREE RD	TEMECULA	CA	92591	39176 SHREE RD	TEMECULA, CA, 92591
957-610-023	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	MURRIETA, CA, 92563
957-662-009	30982 SANJAY CT	TEMECULA	CA	92591	30982 SANJAY CT	TEMECULA, CA, 92591
957-662-010	30972 SANJAY CT	TEMECULA	CA	92591	30972 SANJAY CT	TEMECULA, CA, 92591
957-662-011	30962 SANJAY CT	TEMECULA	CA	92591	30962 SANJAY CT	TEMECULA, CA, 92591
957-662-008	30992 SANJAY CT	TEMECULA	CA	92591	30992 SANJAY CT	TEMECULA, CA, 92591
957-662-004	39150 CHANDLER DR	TEMECULA	CA	92591	39150 CHANDLER DR	TEMECULA, CA, 92591
957-662-006	30977 SANJAY CT	TEMECULA	CA	92591	30977 SANJAY CT	TEMECULA, CA, 92591
957-662-007	PO BOX 14726	LAS VEGAS	NV	89114	30987 SANJAY CT	TEMECULA, CA, 92591
957-662-005	30967 SANJAY CT	TEMECULA	CA	92591	30967 SANJAY CT	TEMECULA, CA, 92591
957-661-010	42430 WINCHESTER RD	TEMECULA	CA	92590	39156 SHREE RD	TEMECULA, CA, 92591
957-662-003	39170 CHANDLER DR	TEMECULA	CA	92591	39170 CHANDLER DR	TEMECULA, CA, 92591
957-662-002	39180 CHANDLER DR	TEMECULA	CA	92591	39180 CHANDLER DR	TEMECULA, CA, 92591
957-661-006	39186 SHREE RD	TEMECULA	CA	92591	39186 SHREE RD	TEMECULA, CA, 92591
957-661-007	39196 SHREE RD	TEMECULA	CA	92591	39196 SHREE RD	TEMECULA, CA, 92591
957-661-008	39206 SHREE RD	TEMECULA	CA	92591	39206 SHREE RD	TEMECULA, CA, 92591
957-662-001	1519 PROSPECT AVE APT E	SAN GABRIEL	CA	91776	39190 CHANDLER DR	TEMECULA, CA, 92591
957-661-009	39216 SHREE RD	TEMECULA	CA	92591	39216 SHREE RD	TEMECULA, CA, 92591
957-650-022	39236 SHREE RD	TEMECULA	CA	92591	39236 SHREE RD	TEMECULA, CA, 92591
957-650-019	39276 SHREE RD	TEMECULA	CA	92591	39276 SHREE RD	TEMECULA, CA, 92591
957-650-020	39266 SHREE RD	TEMECULA	CA	92591	39266 SHREE RD	TEMECULA, CA, 92591
957-650-021	39256 SHREE RD	TEMECULA	CA	92591	39256 SHREE RD	TEMECULA, CA, 92591
957751037	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751050	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751035	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751036	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751038	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751039	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751040	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957751041	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957340068	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL
957-072-032	PO BOX 9033	TEMECULA	CA	92589	N/AVAIL	TEMECULA, CA, 92591

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957-650-023	26201 YNEZ RD STE 104	TEMECULA	CA	92591	N/AVAIL	TEMECULA, CA, 92591
957-340-038	PO BOX 745	MURRIETA	CA	92564	N/AVAIL	TEMECULA, CA, 92591
957-340-042	39421 LIEFER RD	TEMECULA	CA	92591	39421 LIEFER RD	TEMECULA, CA, 92591
957-650-015	39316 SHREE RD	TEMECULA	CA	92591	39316 SHREE RD	TEMECULA, CA, 92591
957-650-016	39306 SHREE RD	TEMECULA	CA	92591	39306 SHREE RD	TEMECULA, CA, 92591
957-650-017	39296 SHREE RD	TEMECULA	CA	92591	39296 SHREE RD	TEMECULA, CA, 92591
957-650-018	39286 SHREE RD	TEMECULA	CA	92591	39286 SHREE RD	TEMECULA, CA, 92591
957-650-012	39346 SHREE RD	TEMECULA	CA	92591	39346 SHREE RD	TEMECULA, CA, 92591
957-650-013	39336 SHREE RD	TEMECULA	CA	92591	39336 SHREE RD	TEMECULA, CA, 92591
957-650-014	39326 SHREE RD	TEMECULA	CA	92591	39326 SHREE RD	TEMECULA, CA, 92591
957-650-011	39356 SHREE RD	TEMECULA	CA	92591	39356 SHREE RD	TEMECULA, CA, 92591
957-650-009	888 E WALNUT ST	PASADENA	CA	91101	39376 SHREE RD	TEMECULA, CA, 92591
957-650-010	39366 SHREE RD	TEMECULA	CA	92591	39366 SHREE RD	TEMECULA, CA, 92591
957-650-006	30913 SONIA LN	TEMECULA	CA	92591	30913 SONIA LN	TEMECULA, CA, 92591
957-650-008	39386 SHREE RD	TEMECULA	CA	92591	39386 SHREE RD	TEMECULA, CA, 92591
957-650-005	30903 SONIA LN	TEMECULA	CA	92591	30903 SONIA LN	TEMECULA, CA, 92591
957-650-007	39396 SHREE RD	TEMECULA	CA	92591	39396 SHREE RD	TEMECULA, CA, 92591
957-340-043	39515 LIEFER RD	TEMECULA	CA	92591	39515 LIEFER RD	TEMECULA, CA, 92591
957-340-045	PO BOX 873	TEMECULA	CA	92593	39519 LIEFER RD	TEMECULA, CA, 92591
957-072-019	30932 ANDREWS WAY	TEMECULA	CA	92591	30932 ANDREWS WAY	TEMECULA, CA, 92591
957-072-018	39444 DIEGO DR	TEMECULA	CA	92591	39444 DIEGO DR	TEMECULA, CA, 92591
957-072-017	39456 DIEGO DR	TEMECULA	CA	92591	39456 DIEGO DR	TEMECULA, CA, 92591
957-072-015	39480 DIEGO DR	TEMECULA	CA	92591	39480 DIEGO DR	TEMECULA, CA, 92591
957-072-016	39468 DIEGO DR	TEMECULA	CA	92591	39468 DIEGO DR	TEMECULA, CA, 92591
957-340-044	39511 LIEFER RD	TEMECULA	CA	92591	39511 LIEFER RD	TEMECULA, CA, 92591
957-072-014	39492 DIEGO DR	TEMECULA	CA	92591	39492 DIEGO DR	TEMECULA, CA, 92591
957-072-012	39516 DIEGO DR	TEMECULA	CA	92591	39516 DIEGO DR	TEMECULA, CA, 92591
957-072-013	39504 DIEGO DR	TEMECULA	CA	92591	39504 DIEGO DR	TEMECULA, CA, 92591
957-072-011	39528 DIEGO DR	TEMECULA	CA	92591	39528 DIEGO DR	TEMECULA, CA, 92591
957-072-009	39552 DIEGO DR	TEMECULA	CA	92591	39552 DIEGO DR	TEMECULA, CA, 92591
957-072-010	39540 DIEGO DR	TEMECULA	CA	92591	39540 DIEGO DR	TEMECULA, CA, 92591
957-080-014	N/AVAIL	N/AVAIL	N/AVAIL	N/AVAIL	39850 SERAPHINA RD	TEMECULA, CA, 92591
957-140-001	2447 29TH ST	SANTA MONICA	CA	90405	39525 LIEFER RD	TEMECULA, CA, 92591
957-140-004	39633 LIEFER RD	TEMECULA	CA	92591	39633 LIEFER RD	TEMECULA, CA, 92591

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957-072-007	39576 DIEGO DR	TEMECULA	CA	92591	39576 DIEGO DR	TEMECULA, CA, 92591
957-072-008	39564 DIEGO DR	TEMECULA	CA	92591	39564 DIEGO DR	TEMECULA, CA, 92591
957-072-006	39588 DIEGO DR	TEMECULA	CA	92591	39588 DIEGO DR	TEMECULA, CA, 92591
957-072-004	39612 DIEGO DR	TEMECULA	CA	92591	39612 DIEGO DR	TEMECULA, CA, 92591
957-072-005	39600 DIEGO DR	TEMECULA	CA	92591	39600 DIEGO DR	TEMECULA, CA, 92591
957-072-002	39640 DIEGO DR	TEMECULA	CA	92591	39640 DIEGO DR	TEMECULA, CA, 92591
957-072-003	39626 DIEGO DR	TEMECULA	CA	92591	39626 DIEGO DR	TEMECULA, CA, 92591
957-140-002	39600 GATLIN ST	TEMECULA	CA	92591	39600 GATLIN ST	TEMECULA, CA, 92591
957-072-001	39654 DIEGO DR	TEMECULA	CA	92591	39654 DIEGO DR	TEMECULA, CA, 92591
957-080-017	PO BOX 1136	TEMECULA	CA	92593	N/AVAIL	TEMECULA, CA, 92591
957-140-006	31041 NICOLAS RD	TEMECULA	CA	92591	31041 NICOLAS RD	TEMECULA, CA, 92591
957-140-005	31050 NICOLAS RD	TEMECULA	CA	92591	31050 NICOLAS RD	TEMECULA, CA, 92591
964-080-003	37760 BOREL RD	MURRIETA	CA	92563	N/AVAIL	MURRIETA, CA, 92563
957-340-055	9740 APPALOOSA RD STE 130	SAN DIEGO	CA	92131	N/AVAIL	TEMECULA, CA, 92591
957-080-016	PO BOX 1136	TEMECULA	CA	92593	30885 NICOLAS RD	TEMECULA, CA, 92591
331-270-004	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-230-003	PO BOX 800	ROSEMEAD	CA	91770	N/AVAIL	ROMOLAND, CA, 92585
331-260-009	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	SUN CITY, CA, 92585
331-250-021	6270 CHADBOURNE AVE	RIVERSIDE	CA	92505	N/AVAIL	ROMOLAND, CA, 92585
331-250-022	2131 WALNUT GROVE AVE # 2FLR	ROSEMEAD	CA	91770	N/AVAIL	ROMOLAND, CA, 92585
331-260-008	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	SUN CITY, CA, 92585
331-300-002	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-300-007	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-290-004	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-280-005	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-300-004	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
331-300-005	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
333-170-005	PO BOX 12008	RIVERSIDE	CA	92502	N/AVAIL	ROMOLAND, CA, 92585
333-170-012	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
333-170-013	1157 SPRUCE ST	RIVERSIDE	CA	92507	N/AVAIL	ROMOLAND, CA, 92585
459-020-069	1995 MARKET ST	RIVERSIDE	CA	92501	N/AVAIL	HOMELAND, CA, 92548
459-311-029	30071 MOUNT MENIFEE ST	ROMOLAND	CA	92585	30071 MOUNT MENIFEE ST	ROMOLAND, CA, 92585
459-311-030	25020 CALIFORNIA AVE	HEMET	CA	92545	30061 MOUNT MENIFEE ST	ROMOLAND, CA, 92585
459-311-031	30066 DIAMOND RIDGE CT	SUN CITY	CA	92585	30066 DIAMOND RIDGE CT	ROMOLAND, CA, 92585

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459-311-032	110 N LINCOLN AVE STE 100	CORONA	CA	92882	30076 DIAMOND RIDGE CT	ROMOLAND, CA, 92585
459-311-047	4340 VON KARMAN AVE STE 110	NEWPORT BEACH	CA	92660	30073 DIAMOND RIDGE CT	ROMOLAND, CA, 92585
459-311-048	30063 DIAMOND RIDGE CT	ROMOLAND	CA	92585	30063 DIAMOND RIDGE CT	ROMOLAND, CA, 92585
459-311-001	30068 HARDROCK DR	MENIFEE	CA	92585	30068 HARDROCK DR	ROMOLAND, CA, 92585
459-311-002	30078 HARDROCK DR	SUN CITY	CA	92585	30078 HARDROCK DR	ROMOLAND, CA, 92585
459-310-022	30075 HARDROCK DR	ROMOLAND	CA	92585	30075 HARDROCK DR	ROMOLAND, CA, 92585
459-310-023	30065 HARDROCK DR	MENIFEE	CA	92585	30065 HARDROCK DR	ROMOLAND, CA, 92585
459-030-010	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	N/AVAIL	HOMELAND, CA, 92548
461-020-004	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	26825 EMPEROR RD	HOMELAND, CA, 92548
461-020-006	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	N/AVAIL	HOMELAND, CA, 92548
459-310-051	11870 PIERCE ST STE 250	RIVERSIDE	CA	92505	30060 PINE NEEDLE RD	ROMOLAND, CA, 92585
459-320-001	11870 PIERCE ST STE 250	RIVERSIDE	CA	92505	30057 PINE NEEDLE RD	ROMOLAND, CA, 92585
459-310-050	11870 PIERCE ST STE 250	RIVERSIDE	CA	92505	30070 PINE NEEDLE RD	ROMOLAND, CA, 92585
459-320-002	11870 PIERCE ST STE 250	RIVERSIDE	CA	92505	30067 PINE NEEDLE RD	ROMOLAND, CA, 92585
459-320-091	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30062 SNOW PEAK CT	ROMOLAND, CA, 92585
459-320-090	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30072 SNOW PEAK CT	ROMOLAND, CA, 92585
459-320-068	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30059 SNOW PEAK CT	ROMOLAND, CA, 92585
459-320-067	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30064 CRESTVIEW CT	ROMOLAND, CA, 92585
459-320-069	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30069 SNOW PEAK CT	ROMOLAND, CA, 92585
459-320-066	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30074 CRESTVIEW CT	ROMOLAND, CA, 92585
459-320-041	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30061 CRESTVIEW CT	ROMOLAND, CA, 92585
459-320-042	4370 LA JOLLA DR # 960	SAN DIEGO	CA	92122	30071 CRESTVIEW CT	ROMOLAND, CA, 92585
459-320-040	30066 MEADOW OAKS ST	MENIFEE	CA	92585	30066 MEADOW OAKS ST	MENIFEE, CA, 92585
459-320-039	4340 VON KARMAN AVE STE 110	NEWPORT BEACH	CA	92660	30076 MEADOW OAKS ST	ROMOLAND, CA, 92585
333-170-066	255 E RINCON ST STE 200	CORONA	CA	92879	N/AVAIL	ROMOLAND, CA, 92585
333-170-011	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	ROMOLAND, CA, 92585
461-030-002	29779 KENTFIELD DR	MENIFEE	CA	92584	27490 BRIGGS RD	ROMOLAND, CA, 92585
461-030-008	27127 CALLE ARROYO STE 1910	SAN JUAN CAPISTRANO	CA	92675	30180 MATTHEWS RD	ROMOLAND, CA, 92585
461-030-009	PO BOX 12008	RIVERSIDE	CA	92502	N/AVAIL	WINCHESTER, CA, 92596
461-030-014	1515 LOWER PASEO LA CRESTA	PALOS VERDES ESTATES	CA	90274	N/AVAIL	WINCHESTER, CA, 92596
461-030-006	1820 NW CARTY RD	RIDGEFIELD	WA	98642	N/AVAIL	ROMOLAND, CA, 92585
461-030-010	PO BOX 12008	RIVERSIDE	CA	92502	N/AVAIL	WINCHESTER, CA, 92596
461-030-004	1820 NW CARTY RD	RIDGEFIELD	WA	98642	30620 MATTHEWS RD	ROMOLAND, CA, 92585
461-050-011	PO BOX 1180	RIVERSIDE	CA	92502	N/AVAIL	WINCHESTER, CA, 92596

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461-140-051	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-027	PO BOX 12008	RIVERSIDE	CA	92502	N/AVAIL	WINCHESTER, CA, 92596
461-140-033	PO BOX 173231	ARLINGTON	TX	76003	N/AVAIL	WINCHESTER, CA, 92596
461-140-009	PO BOX 7041	LAGUNA NIGUEL	CA	92607	N/AVAIL	WINCHESTER, CA, 92596
461-140-034	PO BOX 173231	ARLINGTON	TX	76003	N/AVAIL	WINCHESTER, CA, 92596
461-140-035	PO BOX 173231	ARLINGTON	TX	76003	N/AVAIL	WINCHESTER, CA, 92596
461-140-053	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-036	PO BOX 173231	ARLINGTON	TX	76003	N/AVAIL	WINCHESTER, CA, 92596
462-020-006	1110 RIVER ROCK DR	FOLSOM	CA	95630	N/AVAIL	ROMOLAND, CA, 92585
462-020-039	12671 HIGH BLUFF DR STE 150	SAN DIEGO	CA	92130	N/AVAIL	WINCHESTER, CA, 92596
461-140-025	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-040	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-039	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-041	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
461-140-042	PO BOX 8300	PERRIS	CA	92572	N/AVAIL	WINCHESTER, CA, 92596
462-020-051	16514 MURPHY RD	LA MIRADA	CA	90638	N/AVAIL	WINCHESTER, CA, 92596
462-214-001	211 W RINCON ST STE 108	CORONA	CA	92880	28295 MEMORY LN	WINCHESTER, CA, 92596
462-030-031	27762 ANTONIO PKWY # 280	LADERA RANCH	CA	92694	28560 LEON RD	WINCHESTER, CA, 92596
462-030-033	28362 N STAR LN	MENIFEE	CA	92584	28550 LEON RD	WINCHESTER, CA, 92596
461-150-006	3660 WILSHIRE BLVD STE 108	LOS ANGELES	CA	90010	N/AVAIL	WINCHESTER, CA, 92596
461-160-022	1995 MARKET ST	RIVERSIDE	CA	92501	N/AVAIL	WINCHESTER, CA, 92596
461-160-029	1064 PESCADOR DR	NEWPORT BEACH	CA	92660	N/AVAIL	WINCHESTER, CA, 92596
462-030-024	28640 LEON RD	WINCHESTER	CA	92596	28640 LEON RD	WINCHESTER, CA, 92596
462-030-048	28580 LEON RD	WINCHESTER	CA	92596	28580 LEON RD	WINCHESTER, CA, 92596
462-030-049	28590 LEON RD	WINCHESTER	CA	92596	28590 LEON RD	WINCHESTER, CA, 92596
462-030-026	PO BOX 1018	WINCHESTER	CA	92596	28630 LEON RD	WINCHESTER, CA, 92596
462-030-027	28620 LEON RD	WINCHESTER	CA	92596	28620 LEON RD	WINCHESTER, CA, 92596
462-030-064	28660 LEON RD	WINCHESTER	CA	92596	28660 LEON RD	WINCHESTER, CA, 92596
462-030-022	28680 LEON RD	WINCHESTER	CA	92596	28680 LEON RD	WINCHESTER, CA, 92596
462-030-078	28720 LEON RD	WINCHESTER	CA	92596	28720 LEON RD	WINCHESTER, CA, 92596
462-030-019	4925 AUDRA CT	KEYES	CA	95328	N/AVAIL	WINCHESTER, CA, 92596
462-030-075	28720 LEON RD	WINCHESTER	CA	92596	N/AVAIL	WINCHESTER, CA, 92596
462-030-044	28842 LEON RD	WINCHESTER	CA	92596	28840 LEON RD	WINCHESTER, CA, 92596
462-030-047	PO BOX 837	WINCHESTER	CA	92596	28850 LEON RD	WINCHESTER, CA, 92596

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462-030-038	28870 LEON RD	WINCHESTER	CA	92596	28870 LEON RD	WINCHESTER, CA, 92596
462-030-062	28920 LEON RD	WINCHESTER	CA	92596	28920 LEON RD	WINCHESTER, CA, 92596
462-030-072	28940 LEON RD	WINCHESTER	CA	92596	28940 LEON RD	WINCHESTER, CA, 92596
462-030-013	1705 GOLD HILLS DR	REDDING	CA	96003	29000 LEON RD	WINCHESTER, CA, 92596
462-030-069	33932 CALLE BORREGO	SAN JUAN CAPISTRANO	CA	92675	28960 LEON RD	WINCHESTER, CA, 92596
462-030-012	18400 CABLE LN	PERRIS	CA	92570	31050 OLIVE AVE	WINCHESTER, CA, 92596
462-030-070	28925 MEMORY LN	WINCHESTER	CA	92596	28925 MEMORY LN	WINCHESTER, CA, 92596
462-030-011	PO BOX 998	WINCHESTER	CA	92596	31070 OLIVE AVE	WINCHESTER, CA, 92596
461-280-024	1545 FARADAY AVE	CARLSBAD	CA	92008	N/AVAIL	WINCHESTER, CA, 92596
461-170-007	17992 MITCHELL S STE 100	IRVINE	CA	92614	N/AVAIL	WINCHESTER, CA, 92596
461-160-048	1064 PESCADOR DR	NEWPORT BEACH	CA	92660	N/AVAIL	WINCHESTER, CA, 92596
461-160-028	1995 MARKET ST	RIVERSIDE	CA	92501	N/AVAIL	WINCHESTER, CA, 92596
461-290-001	219 MEADOW VISTA WAY	ENCINITAS	CA	92024	N/AVAIL	N/AVAIL
461-290-003	219 MEADOW VISTA WAY	ENCINITAS	CA	92024	N/AVAIL	N/AVAIL
461-290-002	219 MEADOW VISTA WAY	ENCINITAS	CA	92024	N/AVAIL	N/AVAIL
461-290-004	219 MEADOW VISTA WAY	ENCINITAS	CA	92024	N/AVAIL	N/AVAIL
461-280-022	PO BOX 213	WINCHESTER	CA	92596	29340 LEON RD	WINCHESTER, CA, 92596
461-280-023	1995 MARKET ST	RIVERSIDE	CA	92501	N/AVAIL	WINCHESTER, CA, 92596
461-280-021	HAYDNWEG 5 42781 HAAN GERMANY	N/AVAIL	N/AVAIL	N/AVAIL	29370 LEON RD	WINCHESTER, CA, 92596
461-280-020	29370 LEON RD	WINCHESTER	CA	92596	N/AVAIL	WINCHESTER, CA, 92596
461-170-006	17992 MITCHELL S STE 100	IRVINE	CA	92614	N/AVAIL	WINCHESTER, CA, 92596
461-190-079	41391 KALMIA ST	MURRIETA	CA	92562	N/AVAIL	WINCHESTER, CA, 92596
461-190-082	41391 KALMIA ST STE 200	MURRIETA	CA	92562	N/AVAIL	WINCHESTER, CA, 92596
462-020-026	PO BOX 12008	RIVERSIDE	CA	92502	N/AVAIL	WINCHESTER, CA, 92596
461-280-016	1995 MARKET ST	RIVERSIDE	CA	92501	N/AVAIL	WINCHESTER, CA, 92596
466-030-002	30490 BRIGGS RD	MENIFEE	CA	92584	30580 BRIGGS RD	MENIFEE, CA, 92584
461-190-041	41391 KALMIA ST STE 200	MURRIETA	CA	92562	N/AVAIL	WINCHESTER, CA, 92596
466-340-016	PO BOX 11238	NEWPORT BEACH	CA	92658	N/AVAIL	WINCHESTER, CA, 92596
461-190-084	32041 DEL OBISPO ST	SAN JUAN CAPO	CA	92675	N/AVAIL	WINCHESTER, CA, 92596
461-190-016	29905 LEON RD	WINCHESTER	CA	92596	29905 LEON RD	WINCHESTER, CA, 92596
461-190-019	31102 NORMA WAY	WINCHESTER	CA	92596	31102 NORMA WAY	WINCHESTER, CA, 92596
461-190-015	505 FERNLEAF AVE	CORONA DEL MAR	CA	92625	N/AVAIL	WINCHESTER, CA, 92596
466-340-020	22213 LYNX CT	MURRIETA	CA	92562	N/AVAIL	WINCEHSTER, CA, 92596
461-190-051	505 FERNLEAF AVE	CORONA DEL MAR	CA	92625	N/AVAIL	WINCHESTER, CA, 92596

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466-340-017	PO BOX 11238	NEWPORT BEACH	CA	92658	N/AVAIL	WINCHESTER, CA, 92596
466-340-018	22213 LYNX CT	MURRIETA	CA	92562	N/AVAIL	WINCHESTER, CA, 92596
466-350-018	41391 KALMIA ST STE 200	MURRIETA	CA	92562	30750 LYON AVE	HEMET, CA, 92543
466-120-022	30490 BRIGGS RD	MENIFEE	CA	92584	30701 HOLLAND RD	MENIFEE, CA, 92584
466-120-024	3909 MARSALA WAY	MODESTO	CA	95356	31445 LEON RD	WINCHESTER, CA, 92596
466-310-026	1352 LA LOMA DR	SANTA ANA	CA	92705	N/AVAIL	WINCHESTER, CA, 92596
466-120-014	5242 DEL NORTE CIR	LA PALMA	CA	90623	30965 HOLLAND RD	WINCHESTER, CA, 92596
466-120-023	12526 HIGH BLUFF DR STE 355	SAN DIEGO	CA	92130	30985 HOLLAND RD	WINCHESTER, CA, 92596
466-130-053	22112 WOOD ISLAND LN	HUNTINGTON BEACH	CA	92646	N/AVAIL	WINCHESTER, CA, 92596
466-130-054	5375 W COUGAR AVE	LAS VEGAS	NV	89139	31695 LEON RD	WINCHESTER, CA, 92596
466-130-034	30490 BRIGGS RD	MENIFEE	CA	92584	31595 LEON RD	WINCHESTER, CA, 92596
466-130-035	31615 LEON RD	WINCHESTER	CA	92596	31615 LEON RD	WINCHESTER, CA, 92596
466-320-036	2142 WENTE CT	SAN JACINTO	CA	92583	N/AVAIL	WINCHESTER, CA, 92596
466-320-037	2142 WENTE CT	SAN JACINTO	CA	92583	N/AVAIL	WINCHESTER, CA, 92596
466-130-026	PO BOX 2396	TEMECULA	CA	92593	31727 LEON RD	WINCHESTER, CA, 92596
466-130-027	30940 GARBANI RD	WINCHESTER	CA	92596	30940 GARBANI RD	WINCHESTER, CA, 92596
466-320-009	2142 WENTE CT	SAN JACINTO	CA	92583	31620 LEON RD	WINCHESTER, CA, 92596
466-320-010	31970 LEON RD	WINCHESTER	CA	92596	N/AVAIL	WINCHESTER, CA, 92596
466-320-011	31970 LEON RD	WINCHESTER	CA	92596	31119 ANDOVER LN	WINCHESTER, CA, 92596
466-210-040	155 E 4TH ST	PERRIS	CA	92570	N/AVAIL	MENIFEE, CA, 92584
466-210-024	10746 FRANCIS PL APT 329	LOS ANGELES	CA	90034	N/AVAIL	MENIFEE, CA, 92584
466-330-001	1360 ARBOLITA DR	LA HABRA	CA	90631	N/AVAIL	WINCHESTER, CA, 92596
466-330-002	1360 ARBOLITA DR	LA HABRA	CA	90631	N/AVAIL	WINCHESTER, CA, 92596
466-330-003	1360 ARBOLITA DR	LA HABRA	CA	90631	N/AVAIL	WINCHESTER, CA, 92596
466-340-019	22213 LYNX CT	MURRIETA	CA	92562	N/AVAIL	WINCHESTER, CA, 92596
466-210-037	155 E 4TH ST	PERRIS	CA	92570	N/AVAIL	MENIFEE, CA, 92584
466-220-027	2309 WEYBRIDGE LN	LOS ANGELES	CA	90077	N/AVAIL	MENIFEE, CA, 92584
466-330-004	1360 ARBOLITA DR	LA HABRA	CA	90631	N/AVAIL	ROMOLAND, CA, 92596
466-230-056	32580 LEON RD	WINCHESTER	CA	92596	32580 LEON RD	WINCHESTER, CA, 92596
466-230-055	31049 WICKERD RD	WINCHESTER	CA	92596	31049 WICKERD RD	WINCHESTER, CA, 92596
466-220-014	8001 IRVINE CENTER DR STE 1550	IRVINE	CA	92618	N/AVAIL	MENIFEE, CA, 92584
466-230-063	2526 W CENTRAL AVE	SANTA ANA	CA	92704	N/AVAIL	WINCHESTER, CA, 92596
466-230-064	31118 LORETTA RD	WINCHESTER	CA	92596	31118 LORETTA RD	WINCHESTER, CA, 92596
466-230-059	31025 LORETTA RD	WINCHESTER	CA	92596	31025 LORETTA RD	WINCHESTER, CA, 92596

APN	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP CODE	PROPERTY ADDRESS	PROPERTY CITY, STATE, ZIP
466-230-060	PO BOX 1445	WILDOMAR	CA	92595	31115 LORETTA RD	WINCHESTER, CA, 92596
331-260-005	1522 BROOKHOLLOW DR STE 1	SANTA ANA	CA	92705	N/AVAIL	SUN CITY, CA,92585
331-260-016	PO BOX 800	ROSEMEAD	CA	91770	N/AVAIL	SUN CITY, CA,92585
331-260-018	PO BOX 800	ROSEMEAD	CA	91770	26100 MENIFEE RD	SUN CITY, CA,92585